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TRANSCRIPT OF PROCEEDINGS

WEDNESDAY, JANUARY 21, 1976

The hearing reconvened at 8:45 A.M. on Wednesday, January 21, 1976 in the Chambers of the Montana House of Representatives, State Capitol, Helena, Montana.

The Honorable Carl M. Davis, Hearings Examiner, presided over the proceedings.

APPEARANCES:

Applicants:

William M. Bellingham, Esq.
John L. Peterson, Esq.
John Ross, Esq.

Department of Natural Resources and Conservation:

Arden E. Shenker, Esq.
Donald MacIntyre, Esq.

Northern Cheyenne Tribe, Inc.:

Peter Michael Meloy, Esq.

Northern Plains Resource Council:

Leo Graybill, Jr., Esq.

The following proceedings were had:

HEARINGS EXAMINER: We will continue with the cross-examination of Mr. Knight by the Department of Natural Resources.

CONTINUATION OF EXAMINATION OF DAVID H. KNIGHT

Cross, by Department of Natural Resources and Conservation

By Mr. Shenker (continuing):

Q Mr. Knight, do you know of any change in the attitude of the people knowledgeable in the money market today regarding the cold reception of utility debt and equity?

A There has been a considerable gain in the value of the utility equity of recent, so the money market is certainly easier now than it was a year or so ago.

Q How about utility debt?

A Well, I think there's probably some reduction in interest to -- I'm not familiar with that end of the business.

Q A year or so ago, you knew, did you not, Mr. Knight, that the situation, at least for the Puget Sound Power and Light Company, was that there was a cold reception given to the financing of its projects through utility debt or equity?

A No, that's not true. We were able to finance anything we were financing. We knew the interest rates were going to be higher; we knew that our equity costs were down from there as we'd loved -- like to have them.

Q In order to obtain sufficient credit to finance what you were then doing a year ago, you had had to negotiate a new credit agreement with 22 banks to provide for a maximum of 75 million dollars, is that not correct?

A It probably is. I don't know those details. I don't follow those details.

Q If you'd look at Exhibit 115-B that has been offered in connection with your testimony, the last annual stockholders' report from the Puget Sound Power and Light --

A Well, I can review it and agree with the numbers you read out of it, if that would be helpful.

Q I take it that you sufficiently agree with the numbers that we don't have to read it together. Now, in the event, Mr. Knight, that the Colstrip units 3 and 4 were not to be approved, it is true, is it not, sir, that whatever costs have been incurred by the Puget Sound Power and Light Company, could be amortized over a period of years?

A I do not know if that's the case or not.

Q You don't know that?

A No.

Q Did you not know that Mr. Davis so testified on his deposition in this proceeding?

A I'm sure he assumed it would be, but, again, that is something that would be cleared with our Public Service Commission in our state.

Q Indeed, you so stated. In your Exhibit 115-B, or last annual report, you point out that the company would request the approval of the Washington Utilities and Transportation Commission to amortize charges over a period of years.

A That agrees with what I just said.

A Yes, sir. Do you know whether the Washington Utilities and Transportation Commission has been asked to amortize your obligations of the past?

A I don't believe we've had any situations like this in the past.

Q You've never asked the Washington Commission to amortize, to permit the amortization of your debts in the past?

A Well, I mean, I said we didn't have a situation like this where we've invested money into a plant that was denied. So, surely, we -- lots of things are amortized and spread out over years against our rates. We have done that with our hydro projects.

Q Do you know of any instance in which the Washington Utilities and Transportation Commission has denied your application for amortization of debt?

A No.

Q Are you familiar with the position taken by the Washington Utilities and Transportation Commission, in the last rate hearing in which the Puget Sound Power and Light Company was involved, with respect to the relationship between rates and demand?

A Yes.

Q Then you would know, would you not, in that particular cause which was numbered U-73-57, that the commission expressed to you its grave concern with the massive financing necessary to construct huge power plants which would be the result of unrestrained demand? You knew they were concerned about that?

A I know they're concerned. I don't know if it follows those exact words that you've read or not.

Q The exact words were, "the massive amounts of capital needed." They were concerned about that, weren't they?

A Yes.

Q Now, as a result of that concern, the commission determined that you should flatten your rates, rather than give credit to the large consumers of power, isn't that right?

A I think we filed for a flat rate last time.

Q Well, historically, your utility has followed the practice of rewarding greater use with lower price, isn't that true?

A I don't think that's true, no, because for many years our end block was flat, all the way out, for our residential customers.

Q How do you explain, then, the commission's statement that the residential rates, in the order in that particular proceeding, moved away from the historic practice of rewarding greater use with lower price, providing an incentive to guard against wasteful use?

A Well, it was a change of rate in the middle step, not on the end step, I believe. That's my recollection of it.

Q I take it you agree with the general position, sir, that utility rate structure can promote conservation and dampen growth of demand for electrical energy. Would that be correct?

A I'm not at all sure of that, personally.

Q But you are sure that the Washington Utility and Transportation Commission so ordered?

A Well, I don't know they so ordered. They approved the rates that we filed last time.

Q Well, as of yet, of course, it's impossible to determine with any accuracy what effect the rate restructuring will have upon demand?

A That's correct.

Q The commission was of the opinion, was it not, in the order which they entered, that the rate structure which does not reward greater use with lower price should tend to promote conservation and dampen the growth of demand?

A That's their thought, that it should. There's nothing definitive that it would.

Q And that was the hearing in which Mr. Ambrose testified on your behalf, is that not correct?

A I believe that's correct.

Q Mr. Ambrose is a colleague of Kent Anderson, from the National Economic Resource Associates?

A Yes.

Q Now, yesterday, Mr. Knight, we were looking at the comparison between your Exhibit 18 and the previous revised edition of your Exhibit 18 originally filed in this proceeding. Your associate, Mr. Finnegan, who was with you again today, prepared some comments on the draft Environmental Impact Statement prepared for Colstrip units 3 and 4, to which were appended some further statistics, which he called table 2. Those were your summary of loads and resources taken out of the West Group Forecasts; were you familiar with those, sir?

A Yes, I saw them. I know that the -- what tabulation you are talking about.

Q In addition to the West Group Forecasts which were appended to Mr. Finnegan's comments, there was also a tabulation of the Puget Sound Power and Light Company loads and resources. Did you review those before they were appended to his comments and submitted?

A I don't remember whether I did or not.

Q Mr. Finnegan's deposition, which was taken on May 18, 1975, had appended to it, as Exhibit number 1, the comments that he prepared with respect to the Environmental Impact Statement. Those comments have appended to it the Puget Sound Power and Light Company table of loads and resources for the years from 1974 through 1984, through 1989, or through 1994, I should say. That's a longer period of time than is forecast in your Exhibit

18, why is that, by the way?

A Why is what?

Q That you have a longer period of time forecast in some of your tables than in Exhibit 18?

A We are doing all our forecasting on our loads and resources on a 20-year basis. If you'd want some additional information out of the 20-year period of time, we'd be glad to give it to you. The West Group is done for a 20 year period.

Q Who made the determination not to project 20 years on the exhibits which you offered to this board?

A Well, as far as my concern, I guess I did. I didn't think it had any effect on this case from beyond '85-'86 --

Q Okay.

A Way beyond this particular time.

Q Now, there are some differences, Mr. Knight, between Mr. Finnegan's loads and resources as projected for 1975-1976 and the first edition of your Exhibit 18. For example, in the first year that appears on both of those tabulations, you have forecasted a surplus for 1975-1976, without Colstrip, of 356 megawatts in feet and 89 megawatts on the average energy; but, in Mr. Finnegan's tabulation, although he makes no special distinction between Colstrip or no Colstrip, he has indicated a lesser surplus for the years 1975-1976 on feet, despite the greater surplus of energy. The discrepancies become a little larger as you move into subsequent years; can you tell me why that is the case, sir?

A Well, I think we'd have to go down to each individual resource.

We find the contracts change, you know, what is available to us under these contracts. We find the regulation of the water changes slightly the energy that we get out of these plants. If the water is regulated differently, we get a little different quantity; but in any particular year we can walk right down each individual resource and I can point out the difference, if that would be helpful to you.

Q Let's take the first year that you thought would have been involved in the Colstrip proceeding when Exhibit 18 was first prepared. That would be the year 1979-1980, wouldn't it?

A Mid-'79-'80, correct.

Q Did you compare 1979-1980 between the Finnegan version and the original Exhibit 18 version?

A All right, the loads are identical. There is a slight difference in the capacity quantity of our own hydro --

Q Why is that?

A -- undoubtedly due to the regulation of our reservoirs at the time that the reservoirs -- that the peak occurs. The reservoirs are probably slightly different in elevation, which gives you a slightly different capacity.

Q Why wouldn't you have known that at the time of Mr. Finnegan's tabulation?

A Because it was done a year later and the regulations are determined as you move along; and you don't know what those regulations are until all the data is put together, what the loads and resources of the total amounts to.

Q Well, you're telling me that in the subsequent period of time, until Exhibit 18 was prepared, that you found out that you were going to have more hydro contract resources available to you, and that's not an unusual state of events? Okay?

A There's a slight difference. There's a slight change on the contract hydro, which is probably involved with the withdrawals that the public utility districts have done on the Columbia River.

Q Okay.

A The Canadian Entitlement Return is the amount of capacity that has to be returned from those plants to Canada, because of the upstream storage, which that subsequently power is resold in the United States. The fact that the return goes down if our share goes down, you see. Now, as you see, our share of the plants went down; therefore, our return went down so much.

Q That's the opposite way. This is the earlier one you have your right hand on; that's the Finnegan tabulation; the latter is the Exhibit 18?

A Then the change goes the other way, so it's a variance in change. There's a one megawatt differential in the calculation of overloading a gas turbine, apparently, or a rounding; there's probably a rounding of one. He gave committments again; it's probably a rounding of the various contracts we have, same thing. So we end up with two megawatts differential --

Q On your --

A -- on the capacity; 1326 against 1328 in the different tabulations.

Q That's that portion of your capacity that is not hydro

A Yes, these are the contracts. This one there is a bigger change because of these two changes here.

Q The differential in resources is 35 megawatts altogether?

A I think it's 25 --

Q Whatever it is, it changes it?

A -- but, of course, it changes the reserves depending on it slightly, on the differential in reserves. So, I guess the energy is going to be rather difficult for me in comparison because they've got holes in the sheets and I can't see it.

Q We'd better take the next year.

A '79-'80.

Q We've finished that one, so let's turn to 1980-'81. Now, let's take the bottom lines first, Mr. Knight. In 1980-'81, according to the earlier Finnegan draft, your total resources would have been 3,464 megawatts. According to the later version of the first Exhibit 18, your total resources for 1980-'81 would have been 3,502 megawatts. Did I read those lines correctly?

A All right.

Q Now, my question to you, sir, is that it's apparent that you have increased the total resources available to you for the year 1980 between the time of the Finnegan draft and the original Exhibit 18?

A That's 38 megawatts.

Q That is not an unusual state of events either, is it?

A Very slight change, and it's all undoubtedly contractual changes that have taken place, withdrawals, slightly different payback on the Canadian Entitlement.

Q Now, Colstrip 3 and 4 are both listed for that year 1980-'81, aren't they?

A That is correct.

Q And the amount of megawattage that you projected for both of those years is the same?

A That is correct.

Q Now, if we move to the next year, 1981 to 1982, your total resources move upward, as you move further in time into the first version of Exhibit 18, by an additional 59 megawatts, 3,434 versus 3,493?

A Yes, and again, the largest block of it is the change in withdrawals and we're up to date on what their actual withdrawals are on the Columbia River.

Q All right.

A The other resources, the change is only 11 megawatts. I wish I could estimate my peaks that close, as the resources.

Q But it's not that fine a science, is it?

A No.

Q Then the next year, the 1982-'83 year, you had projected Mr. Finnegan's tabulation in the total resource of 3,154 megawatts. The subsequent preparation of the first version of Exhibit 18 had total resources at 3,537 megawatts, or an increase of some 83 megawatts; is that correct?

A Correct, if the arithmetic is correct; a slight increase, 2 percent.

Q The point of the matter is, Mr. Knight, is it not, that as you go further forward in time in your resource planning, you have been able in each instance to show the greater availability of resources for your company; not by huge quantities, but as you refine your analysis?

A By very minor quantities; and, as you know, as we move out close to that, we get more information; they swing the other way, because of indications of what these withdrawals will be; so we may circle around two years from now and they'll swing the other way slightly.

Q We saw yesterday that as you compared your first version of Exhibit 18 with your present version of Exhibit 18, that the situation had regularly improved over that period of time in those two exhibits; and we see generally, in the comparison of the Finnegan Exhibit with the first version of Exhibit 18, that the same thing happened there, too?

A A very slight amount.

Q We're talking about the total resource base in these first two years of between three and four thousand megawatts, the changes are of the magnitude of a total of something between 30 and 80 megawatts. We are talking about something between 1 and 3 percent of the load?

A No greater than 3 percent.

Q Yes. Now, the fact of the matter is, that as you project your loads and resources, Mr. Knight, the state of the art, as you use it for load forecasting in resource analysis, simply doesn't permit you accurately to make your projections within that margin of 3 to 4 percent, does it?

A I think that our accuracy is certainly within the 3 percent accuracy, that's right.

Q You think that you can come as close as within the 3 percent margin of determining what it's going to be five years from now?

A I think historically the record shows that.

Q Well, what historically the record shows from the papers that we have examined with your testimony, is that you shift your projections from year to year by as much as 3 or 4 percent?

A I said it was within 3 percent. I don't remember the 4 percent. I remember the 3 percent and about what the difference was, maximum.

Q Now, one of the things that I'm curious about, Mr. Knight, on your loads and resource analysis, is that while we find these shifts in the total amount of your loads and resources, depending upon which set of papers we're looking at, as we move further forward in time, more resources seem to be available. The amounts of your resources over that shifting period of time have remained -- excuse me, the amounts of your loads projected over that shifting period of time have remained remarkably constant. Could I conclude from that fact that you simply haven't changed your forecasts?

A We have not changed our forecasts since the fall of 1974. That's when that forecast was made. The forecast has been constantly reviewed, and we've decided that that is as close a reliable forecast as we could make at this time.

Q When you prepared your direct statement of testimony for this proceeding, Mr. Knight, as we went over with you yesterday, you determined that with Colstrip 3 and 4, Puget would incur deficits for all the years 1979-1980 through 1985-'86, with the exception of a two-year gap between 1983 and 1985. When Mr. Finnegan prepared his comments on the Environmental Impact

Statement, his observation was that the Puget system would experience energy deficits in the same years, 1979-1980 through 1982-1983. Was the addition of the period 1985-1986 an afterthought?

A Afterthought after what?

Q After Mr. Finnegan prepared his comments?

A I'm afraid that I didn't even look at Mr. Finnegan's comments when this data was prepared.

Q Didn't he help you prepare it?

A Yes.

Q On Exhibit number 18, Mr. Knight, if you'll look at the first entry for your Skagit number 1, the peak resource available to you is first found in 1983 in the current edition of your Exhibit number 18-B, and it shows 730 megawatts for Skagit number 1?

A That is correct.

Q Did you not earlier project a lesser amount of megawattage out of Skagit number 1?

A Yes, sir.

Q How did you happen to find out later that you were going to get an additional 100 megawatts out of Skagit number 1?

A I don't think it's an additional 100 megawatts.

Q How much was the earlier --

A I think it was the difference between 644 and 730, wasn't it? The difference is --

Q Okay, 86 megawatts, instead of 100 megawatts?

A It's a difference of an allocation of 50 percent of the plant against 56.6 percent of the plant.

Q Yes?

A Westinghouse did some work on that but I'm not sure what phase of it.

Q Yes, the Westinghouse Environmental Sciences Division, the same contractor as for Colstrip, right?

A That's right.

Q Were there the same people for Westinghouse involved both in your Skagit assessment and the Colstrip assessment?

A I really don't know, because I had no contact with their work on the Skagit plant.

Q Mr. Finnegan had most of that contact, I assume?

A Yes.

Q Did you know that he had contact with Harold Beisel, who did work for you in assessing the socioculture impact of your Skagit plant; Mr. Beisel's from Westinghouse; you know him?

A Yes, I know who he is.

Q You knew that he was involved in the Skagit assessment, didn't you?

A Not specifically, but I could review it with Mr. Finnegan and have it verified, because I did not work with Westinghouse personally at all on this environmental report.

Q Did you know that Mr. Beisel was one of the principal investigators for Westinghouse in the Colstrip project?

A Yes.

Q These fellows seem to get around all right between you and the Montana Power Company as sponsors of different projects. Is there just a coincidence to that or is there some agreement generally among utility companies as to who their investigators should be?

A We tend to always hire the most qualified people to do our work for us.

Q You just tend to agree on who the most qualified people are?

A Not necessarily.

Q Was it your understanding, Mr. Knight, that the Colstrip units would have 90 percent SO_2 removal?

A I don't believe I have any particular understanding on that. My understanding was that we'd meet all state and federal regulations in that respect.

Q Do you know Mr. R. R. Sonstelie? S-O-N-S-T-E-L-I-E.

A Yes.

Q He works for Puget, doesn't he?

A Yes.

Q On May 19 of last year, sir, he delivered a memorandum to your Mr. Ferguson, with a copy to you, in which he was describing some studies based upon assumptions of delivery of coal by rail versus the construction of nuclear units, presumably having reference to such as Skagit. I'm going to hand you a copy of that memorandum, Mr. Knight, and point out to you on page 2, table 1, where Mr. Sonstelie describes a 90 percent SO_2 removal system as in Colstrip 3 and 4. My question to you will be whether you recall having received a copy of this memorandum?

(Mr. Shenker hands document to Mr. Knight. Pause to review.)

A I have seen this before.

Q All right, sir. When you received that memorandum, Mr. Knight, did you have any particular reaction to the reference to the 90 percent SO_2 removal system at Colstrip?

A I didn't pay any attention. That wasn't appropriate to this thing and it doesn't, as I read it, say that the Colstrip units would or would not remove 90 percent. Mr. Sonstelie is an accountant in our organization, not an engineer; and it says, "such as," and it doesn't necessarily say of a similar type. I wouldn't rely on the fact that even Mr. Sonstelie had any particular opinion on what was happening at Colstrip.

Q All that the language says is it's an outline form, and all it says is, "90 percent SO_2 removal system as in Colstrip 3 and 4"?

A Now, the system is that. It doesn't mean that the 90 percent is that.

Q Yes, it could mean a 90 percent SO_2 removal system which is similar to one being used in Colstrip 3 and 4, which may or may not have 90 percent removal, right?

A It could mean either, yes.

Q Okay. As you say, this was not the basic purpose of the study, to determine what the removal efficiencies were at Colstrip. The basic purpose of this study was to compare the nuclear project you had underway with an alternative of shipment of coal by rail to a load center coal-fired generating station, right?

A That's correct.

Q Since May of 1975, have you continued to study the alternative of rail shipment of coal to a load center coal-fired generating station?

A Since May of 1975 I'm sure that we've watched the freight rates. The people who have been involved with it -- as far as being at an equal or higher level, but that data primarily is related to our nuclear hearings.

Q Why are you still looking at freight rates for coal hauling?

A All I'm saying is that it's just a process of keeping up-to-date the people that are involved in that.

Q Do you recall, Mr. Knight, shortly before the application for Colstrip units 3 and 4 was filed, the preparatory steps, in which you and others from Puget participated, to prepare for a conference with representatives of the governor and other state agencies in Montana for presentation to them?

A Vaguely, yes.

Q More specifically, on the 9th of May, 1973, you participated in a conference call with Mr. McElwain, Mr. Labrie, Mr. Hofacker, and Mr. Ross, of the Montana Power Company; Mr. Ellis and Mr. Finnegan, of the Puget Sound Power and Light Company were participants; and you talked about what presentations should be made, and what strategies should be followed; do you recall that?

A Well, not specifically, no.

Q W.J.F. is Mr. Finnegan, isn't it?

A It might be Mr. Finnegan or it might be Mr. Ferguson. They both have the same initials.

Q Which makes life complicated. Can you recognize their handwritings?

A I can't read either one of them, but I'll try.

Q Are there degrees of illegibility?

A Yes.

Q I'm showing you some handwritten notes of a telephone conversation of May 9, 1973. Is that Mr. Ferguson's illegibility or Mr. Finnegan's illegibility?

A I think that's Mr. Finnegan's illegibility. I can't read a thing on this one.

Q Well, he was able to help us a little bit in the reading of the handwriting. For example, under Labrie, he was able to help us read the scrawl to mean, "Department of Health regards completion of 1 and 2 for testing before 3 and 4 permitted." Do you remember that?

A No.

Q Do you remember any conversations on that subject in the past?

A No, I'm afraid not. I don't recall.

Q Okay. Now, in March of that same year, before the application was filed for this proceeding, sir, you also participated in a conversation in which you had a disagreement with Roger Hofacker, of the Montana Power Company, on a pipeline problem related to our considerations here. What's a pipeline problem? What pipeline would be involved?

A Well, the pipeline involved, that I know of, was the pipeline between the Yellowstone River and the surge pond for cooling water.

Q Do you remember any concern with that pipeline?

A The only thing that comes to mind is there was an evaluation on the pipeline in which I disagreed with the methods of the evaluation that they had done on it.

Q Do you recall expressing the opinion, Mr. Knight, that Colstrip units 1 and 2 were in jeopardy because of the new siting bill?

A That 1 and 2 were in jeopardy? No, I don't remember making that statement.

Q This is W.J.F. again. It looks like the same brand of scrawl as Mr. Finnegan had on the other notes we were looking at. These are dated March 12, 1973, and there's a reference to D.H.K. That's you, isn't it?

A That's me.

Q Yes. And it says 1 and 2 are in jeopardy because of new sitinc bill?

A Well, that's what that statement says, but I'm sure there's probably some background in it as to -- maybe it was related to the getting an early decision on the pipeline and the transmission line, which are under the siting act; but the plants were under construction.

Q You can't specifically recall what the concern was that you had on the jeopardy for Colstrip units 1 and 2?

A No.

Q You were not personally present, were you, Mr. Knight, at the meeting with the governor and representatives of state agencies in Montana for the filing of the application?

A I did meet with the governor, but it was probably before 1 and 2 rather than before that filing.

Q Representatives of Westinghouse conferred with the representatives of Puget Sound and the Montana Power Company in making that presentation in May of 1973, is that not true?

A You mean the Westinghouse presentation with respect to the environmental report?

Q No, that didn't come until later on in the fall, but in May of 1973, before the application was filed, representatives of the applicants got together with Westinghouse to see what presentation they should make to the governor and representatives of state agencies. Do you recall that?

A I do not recall that. I'm sure I wasn't present at that.

Q This telephone conversation, which was the conference call that Mr. Finnegan recorded in his scrawl that we looked at first, May 9, 1974, recorded some of the comments of what folks thought they should do in preparation for that presentation. Now, you participated in that telephone conversation. Do you recall the planning that was underway for the presentation to be made here in Montana before the application was filed?

A I really don't recall. If I could read the notes or talk with Mr. Finnegan, it could probably bring me up-to-date, but we go through some hundreds of calls every month that I'm involved with and it's very difficult for me to remember these things in specifics.

Q This was a very important one, wasn't it, in planning for Colstrip 3 and 4?

A Yes, but as I say, we have many important ones. Was this the one that Mr. Hodel also was present at?

Q Yes, sir. Were you present then?

A No, I was not present. I knew I was not present.

Q Mr. Hodel's role as the Administrator of the Bonneville Power Administration is the subject of some of the comments in these notes, as to what he should say in the discussions, the areas that he should cover. Did you know that he was going to be involved in that presentation?

A I remember that he was going to be involved, yes.

Q Now, in the earlier notes which you looked at with me a moment ago in which you had expressed your concern as to jeopardy for Colstrip units 1 and 2, there also were references to discussions with Mr. Wright, who was the Director of the Westinghouse Environmental Analysis for the Colstrip applicants. Do you recall his expressing his view that the function which the state agency should have performed for it, by the applicants, is to have them outline what the Environmental Impact Statement should say, and that that should be the subject of part of the discussion with the governor. Do you recall that?

A I do not recall that, no.

Q Does that strike you as a pretty expeditious way to proceed?

A Well, I think maybe you'd better repeat it or at least think it out thoroughly. It's kind of an awful tough thing.

Q Okay. How about this scenario: In early 1973 the Colstrip applicants hire Westinghouse to do an environmental analysis. In the spring of 1973, as the Utility Siting Act is coming up for passage before the legislature, Westinghouse confers with the applicants and seeks to explain what procedures should be followed in order to pursue the application. In May of 1973, the applicants get together to determine what they should do by way of presenting their best case to the governor and state agencies, and the applicants determine who should say what in the presentations that would be made. Prior to the filing of the application, Westinghouse confers with the applicants and explains that one of the purposes should be to write an outline of the Environmental Impact Statement that would have to be prepared by the state agency charged, by the new Siting Act, with evaluating the proposed application, all in order to obtain licensing and permits by the spring of 1974. Now, while you are thinking about that scenario, does that strike you as a pretty expeditious way to proceed? This was my question.

A The answer is yes.

Q And that's a pretty good characterization of how the applicants did proceed, isn't that right?

A Probably that is the case because it's very important that environmental impact statements follow all the rules and regulations of both federal and state laws.

Q Now, one of the things of concern to the applicants, of course, was to provide employment for the Indian tribes who would be in the area most affected by Colstrip development; isn't that right?

A Well, that's one of the things that happened with the project, yes.

Q Do you know what steps were taken in order to ensure that employment?

A Not specifically, but I know Montana has encouraged that and I'm sure that the Bechtel people have encouraged hiring local people.

Q We had some discussion yesterday, Mr. Knight, on construction time, or lead time, as the case may be, for the Colstrip units; or for coal-fired power plants anywhere. Do you have some reason to know why Mr. Finnegan's notes should show four-year construction time?

A No.

Q Would July of 1974 have been a crucial date in your original planning for Colstrip 3?

A The 1974 date was crucial as far as getting started in order to get the plant in on schedule, by 1978.

Q Well, that sort of sounds like four years, doesn't it?

A Well, that's a strip of construction that doesn't take into account all the time that you had put in before that, for proving up the site and what not. If it's "rawbones" construction, yes.

Q Would you still go along with four years as construction time?

A Well, four to five. I'm not sure. It depends on the plant and the location, and what the problems are related to it, whether it would be in the four to five to six year period, but it depends on where it's at and what is encompassed in each plant.

Q How about at Colstrip, Montana; how long do you think it should take to construct a plant there?

A Well, assuming that you've gotten everything ahead, your orders on your equipment, the engineering, you could get a unit in in four years; but you've got a lot of lead time ahead of that which you've got to take into consideration.

Q As of the time that your application for the Colstrip unit was filed, Mr. Knight, do you think it would have been a correct characterization that the Puget Sound Power and Light Company had two principal commitments to the development of resources: First, the ownership in the coal-fired mine-mouth steam plant, consisting of four generating units at Colstrip; and second, the proposed nuclear plant in Skagit County, Washington?

A I'm sorry, what is the question in respect to those?

Q Were those your two principal commitments for generating resources?

A The main energy quantity, yes. We have others besides that; the Rock Island project for one.

Q That hydro project you were talking about?

A Yes.

Q That's a contractural commitment.

A And the WNP number 3 unit.

Q Well, as of that time, Mr. Knight, that was June of 1973 that the application was filed, or indeed by the end of that year of 1973; would it have been your view that with the Skagit County project, your nuclear developments, and your participation in the Colstrip project, along with some smaller commitments, mainly hydro,but Hanford would also come in with that; those would provide sufficient capacity with adequate diversity to meet all of your needs in the time frame through 1985?

A They certainly would have, yes.

Q It's not true anymore, is it?

A No, because we've had delays in getting plants on line.

Q Even if you are able to get Skagit in as early as you have projected, it certainly would not have been true, even in 1973, would it, Mr. Knight, that you would have been able to meet all of your loads with the resources that appear on our Exhibit 18?

A Well, if Colstrip had come in in '78-'79, I believe so. I'd have to look back at the numbers.

Q In 1973, you weren't planning to have the Skagit project available to you by 1979, were you?

A No, '82.

Q If you'd had Colstrip available to you in 1979, according to the exhibit which you first had prepared for these proceedings in March of 1975, you forecasted that you would have an average energy deficit, with Colstrip, of some 79 megawatts?

A If I could see the numbers, I could probably explain why that's not the case.

Q Do you have a copy of the old Exhibit 18-B there?

A What year are you looking at?

Q 1979-1980.

A All right, 1979-1980. If you will note, there is only one unit of Colstrip in there, whereas we were planning the second unit would be in 1973. The first unit will come in 1978, the second unit will be in in 1979, and we would not have been deficient.

Q Well, if you look at 1980-'81, that's got Colstrip 3 and Colstrip 4; and with Colstrip 3 and 4, you still have a deficiency of 56 megawatts in average energy.

A Again, Colstrip 4 would have been, of course, not in at 98 megawatts; it would have been in at the full 129 megawatts, which would leave you 26; and whether or not there was a change of that slight degree of 26 megawatts with respect to those individual contracts, I don't know.

Q All right, let's move to the next year when you do have Colstrip 4 in for 129 megawatts; in that year you have 131 megawatt deficiency in average energy, isn't that true?

A The only thing I can say is that might have been the time that we had changed our schedule from '82 in Skagit, back to '81, trying to make an '81 date. When we originally announced Skagit, we were looking at an '82 date, and the Bonneville Power Administration and others urged us to try to make the '81 date; and if that was the case, that would have covered it.

Q Well, I take it you are not in any way surprised to know that in the 1973 annual report of the Puget Sound Power and Light Company, written in March of 1974 to your share owners and employees, the president of the Puget Sound Power and Light Company, Mr. Davis, said that the two principal commitments, Colstrip and Skagit, with a number of smaller ones, would provide sufficient capacity with adequate diversity to meet the company's anticipated needs in the appropriate time frame between now and about 1985. That doesn't surprise you, does it?

A Not really.

Q The fact that there is 131 megawatt average energy deficiency in 1981 --

A Well, I'm not sure --

Q -- assuming you knew, you could have covered it?

A I'm not sure that is the case. We'd have to go back and look at the calculation of what our contractural rights were as of that date.

Q If we went back further, Mr. Knight, to the only earlier load and resource tabulation which we have, there is the Finnegan tabulation that appeared with the comments on EIS; and that showed, through the last year that we were discussing, 157 megawatts of deficiency with all of the Colstrip units in; right?

A That is what that tabulation shows, yes.

Q But, the fact of the matter is that it's your job, for the Puget Sound Power and Light Company, to cover load with making sure that adequate resources are available when the load has to be serviced, right?

A That is correct.

Q And you've managed to do that, haven't you, sir?

A To date.

Q You have to scramble some, don't you?

A Indeed.

Q What does it mean to you, Mr. Knight, to say that, as far as the Colstrip project is concerned, the Puget Sound Power and Light Company has options to participate in the ownership of 1400 megawatts at Colstrip 3 and 4?

A In the ownership contract on 1 and 2, we had an arrangement that in the event that there was an expansion, we would be -- because of the fact that we had invested in 50 percent of the cost of the site and what not, we would have rights to participate in future units up to 50 percent.

Q Well, after June 6, 1973, when the application was filed, did you still think you had options to participate?

A No, we had come to the conclusion of participating to the degree of 25 percent.

Q Well, can you tell me then, Mr. Knight, why the Puget Sound Power and Light Company should have said in its filing with the Securities and Exchange Commission of the United States, in their Form 10-K for the fiscal year ended December 31, 1974 page 6, that under the ownership agreement with Montana Power, the company, referring to Puget Sound Power and Light Company, has certain options to participate in the ownership of the next 1,400,000 kilowatts -- that's the same as 1,400 megawatts isn't it?

A Yes.

Q -- of generating facilities constructed in Montana by Montana Power, which would burn coal controlled by western energy companies. Why would the company have used that language, that the company has certain options to participate in the ownership of the 1400 megawatts at Colstrip units 3 and 4? That's in a document filed just last year.

A I'm sure that it is really a legal question. Those things are prepared by our counsel; and the thing is, I know what the contract says, and I know what rights we exercise; but I had nothing to do with preparing the 10-K. Maybe it's just a repeat from something that was in previous 10-K.

Q As far as dollars are concerned, we talked yesterday about Mr. Davis' projection of 250 million dollars as the Puget Sound's share for its 25 percent of the project. By the end of the fiscal year, December, 1974, according to the same Form 10-K, Puget's share was 188 million dollars. That doesn't sound out of line as an estimate at that time, does it?

A Probably not.

Q And those costs have gone up since then, haven't they?

A Yes.

Q Is it still your view, sir, that additional permits from at least federal agencies, together with environmental impact statements, will be required for the additional Colstrip units and related facilities?

A I think so.

Q Have any applications to that intent been filed?

A I do not know.

Q According to the same Form 10-K, Mr. Knight, page 16, the cancellation charges on the Colstrip units were approximately $1,600,000 as of December 31, 1974, and were not expected to increase materially in 1975. Was that your view, sir?

A I don't know as I've even given it any thought.

MR. SHENKER: I have no further questions at this time, and I have no objections to any of the exhibits prepared by Mr. Knight in connection with this proceeding, nor to the applicant Puget's annual report.

HEARING EXAMINER: Thank you Mr. Shenker. Maybe we should take our recess before we start our next cross-examination, if that is agreeable with everyone. Let's take a 15 minute recess.

(RECESS AT 9:57 A.M.)

Following a brief recess, the hearing reconvened at 10:20 A.M. on January 21, 1976.

HEARINGS EXAMINER: Is everybody ready to proceed? Let's proceed with Mr. Meloy, cross-examination.

CONTINUATION OF EXAMINATION OF DAVID H. KNIGHT

Cross, by Northern Cheyenne Tribe, Inc.

By Mr. Meloy:

Q Mr. Knight, you live in Bellevue, Washington?

A That is correct.

Q Is that in the Seattle area?

A Well, it's adjacent to Seattle. It's east of the city of Seattle.

Q How many people live in that area, approximately; do you know?

A Within the city limits of Bellevue?

Q No, within the Seattle-Bellevue area?

A Oh, approximately a million people.

Q A million people?

A Yes.

Q Do you know how many people live in Rosebud County?

A No.

Q Would it surprise you to learn that there are 6300 people in Rosebud County?

A No.

Q Do you care how many people live in Rosebud County?

A No.

Q Do you know where Clarkston, Montana is?

A No.

Q Ever been to Clarkston, Montana?

A Not to my recollection.

Q Ever been to Cushman, Montana?

A Not to my recollection.

Q Ever been to Townsend, Montana?

A Not to my recollection.

Q Ever been to Trident, Montana?

A Not to my recollection.

Q Ever been to Livingston, Montana?

A I may have passed through Livingston.

Q How about Nichols?

A I'm not sure whether I have or not.

Q Do you know where Nichols is?

A Well, not for sure, no.

Q Do you know the significance of those towns that I just asked you about?

A With respect to what?

Q With respect to the siting of units 1, 2, 3 and 4?

A Well, if they're near it, they're near it. I don't quite understand the question.

Q Well, did you hear Mr. Labrie's testimony?

A Some of it, yes.

Q Mr. Labrie told us that those were the alternative sites for Colstrip 1, 2, 3, and 4. I take it, then, because you don't know of those places, you weren't involved in planning of the site at Colstrip; is that right?

A That is correct.

Q Why did you come all the way to Colstrip to get power for your area?

A Because it was a plant that was available.

Q Did you look at any alternative sites -- your company?

A No, we did not.

Q Have you ever been to Busby?

A Where?

Q Busby?

A Busby?

Q Busby, Montana?

A Not that I recollect.

Q Have you ever been to Lame Deer, Montana?

A I've driven through Lame Deer, yes.

Q I take it, then, you've been to Colstrip?

A Yes, I have.

Q Do you know where the Northern Cheyenne Reservation is?

A Yes, I do.

Q Where is it?

A South of Colstrip, Montana.

Q Do you know what the prime economic base of the Northern Cheyenne Reservation is?

A Only to the degree of what you said it was yesterday.

Q And that's when I informed Mr. Labrie, who is the chief planner for the Montana Power Company, who didn't know what the main economic base of the Northern Cheyenne Reservation was; isn't that right? That's when you learned that?

A That's when I learned what you stated it was.

Q Do you know anything about the economic base of Rosebud County?

A I'm sure, from what I've seen of Rosebud County, it's primarily cattle ranching.

Q And that's just because of your view as you've driven through Rosebud County?

A Yes.

Q Did it surprise you to know that Mr. Labrie had not done any studies -- any written studies -- of the impact of your decision to enter into building plants at Colstrip?

A Would you mind repeating the question?

Q Well, Mr. Labrie not only told us he didn't do any written studies of the impact of that plant on the Northern Cheyenne Reservation, but he, himself, had very little, if any, knowledge about the economic base, about prime problems, about the history, the culture of the Cheyennes, nor did he even really know where the Cheyenne Reservation was. What I'm asking you is, do you know anything more about it?

MR. BELLINGHAM: We object to the form of questioning as assuming facts not in evidence relative to what Mr. Labrie testified to yesterday.

HEARINGS EXAMINER: Could you rephrase your question, please, as to what you want to ask him?

Q Do you know anything about the Northern Cheyenne Reservation, other than what Mr. Labrie knows?

A No.

Q Do you care about the Northern Cheyenne Reservation?

A I don't know what you mean by "do I care about it."

Q Do you have any interests in it?

A I have no specific interest in it, any different than any other area.

Q Mr. Knight, how is the air in Bellevue?

A Wet.

Q Is it clean?

A Relative to what?

Q Do you get blue skies?

A Several times a year.

Q When the sun is shining?

A Pardon?

Q When the sun is shining?

A Yes.

Q How's the water in Bellevue.

A My drinking water?

Q Yes, your drinking water.

A I've never gotten sick on it yet.

Q Mr. Knight, you are a participant in this application, and because of that participation, I take it, you share in the costs and expenses of this proceeding; is that correct?

A That's correct.

Q To the extent of your ownership in the units?

A Yes.

Q Why have you chosen not to have any of your counsel here for this proceeding?

A I haven't chosen that.

Q You haven't chosen that?

A I do have counsel here.

Q Have your counsel been here at any other time than when you were here to testify?

A Mr. Bellingham is our counsel for the Applicants.

Q Mr. Bellingham is a Montana lawyer; is that correct?
A No, he's the Applicants' lawyer.
Q But he is a Montana lawyer, isn't that correct?
A Oh, you mean lives in Montana?
Q Yes.
A Yes, he does live in Montana.
Q I handed you, Mr. Knight, Volume 51 of the transcript of the proceeding before the Board of Health, and in that transcript is contained the oral argument before the Board of Health. On page 7336, would you please read lines 23 on that page and lines 1 through 4 on the next page? That excerpt that I've given you is Mr. Bellingham's closing argument before the Board; Mr. Bellingham, your attorney. Will you please read that for the record?
A "Now we have Sir Gallahad from Pacific Coast, who have come in here and told us how we should run our city. We've had Sir Gallahads from Chicago by way of Washington, D. C. We have had them come in from everywhere and they all tend to do one thing; to tell Montanans how we should run things here. How presumptuous they are to a great extent, and when this decision is eventually handed down, will they be here to suffer any detriment that may be caused by that decision as far as the State of Montana is concerned. Oh, no. They won't be here like the rest of us. They'll be going back from whence they came from."
Q Will you be here, Mr. Knight?
A When?
Q When the decision is made? Personally, will you be here?

A Probably not as a permanent resident, but I'll be here.

Q If the Board of Natural Resources should grant us a certificate, will the plant that's built at 3 and 4 have any impact on your air in Bellevue, Washington?

A Well, the lack of 3 and 4 may have an impact on our air, if there isn't sufficient power to do the things that need to be done in our area.

Q How about your water, your good drinking water that you've never gotten sick on?

A Well, I'm sure it doesn't have any effect; it runs down the mountain and it's chlorinated.

Q What detriments will occur to you as one who lives on the Pacific Coast on your way of life should Colstrip 3 and 4 be built?

A I think none if they are built.

Q No, you really are here because you stand to derive benefits from the building of Colstrip units 3 and 4; isn't that right?

A Well, it certainly is to our benefit, not only to our area, but to the total region if they're built.

Q Can you think of any detriments that will occur to that area if Colstrip 3 and 4 are built?

A To what area?

Q To the area that you're talking about, your service area?

A Not if they are built; certainly detriments if they are not built.

MR. MELOY: I have no further questions, Mr. Davis.

HEARINGS EXAMINER: Mr. Graybill?

Cross, by Northern Plains Resource Council

By Mr. Graybill:

Q Mr. Knight, as I understand, yesterday in answer to questions by Mr. Shenker, you said that in the bad years, in the early '80's, for your company, your company would buy power from other power companies in the Pacific Northwest; is that true?

A I'm sure we were discussing capacity only.

Q Yes, you would buy any deficiencies --

A Peaking capacity only.

Q And you made the statement that, while your company had deficiencies, there were no area deficiencies in 1982 to '86 as far as you know; is that correct?

A No, I did not say that.

Q Well, I think that's exactly what you said because I wrote it down. Now, if you want to explain it to me, I'd like to have you explain it; but you said there were no area deficiencies in the Pacific Northwest in 1982-86; now, are you talking about capacity deficiencies or energy deficiencies?

A There is a complete difference, Mr. Graybill.

Q Sure. Let's talk about capacity deficiencies.

A Alright, fine.

Q You said there are no capacity deficiencies; is that right, in the area in 1982-86? Now if you'd like, we can go back and read your statement of yesterday, but I wrote it down; I have the notes here. You were talking about Exhibit 18-C and 18-D and Mr. Shenker asked you, just so we can reconstruct it, how you were going to supply the parts that showed in yellow, since you show that you don't have them even in one case with Colstrip, and in one case, without. And he said, what are you going to do to supply the yellow parts on your Exhibits 18-C and 18-D. Now, I thought this was automatic, but if you'd like to explain it to me again, I'd be glad to hear how you're going to supply that yellow.

A The area, if I remember the dates, the area is not deficient in peak capacity from 82 through 86.

Q Alright, that covers Exhibit #18-D; how did you explain to Mr. Shenker that you would supply the yellow areas on Exhibit 18-C?

MR. BELLINGHAM: May I address a question here. We're talking about area and also specific Exhibits 18. These exhibits, I might point out, are for the future only; and I'm wondering if by area you mean restricted to Puget's area?

MR. GRAYBILL: Mr. Hearings Examiner, this is my cross-examination and Mr. Bellingham may re-examine later; but I think the witness and I know what he's talking about and I would like to have the witness answer instead of Mr. Bellingham.

HEARINGS EXAMINER: Well, gentlemen, if you've got an objection, just make a formal objection and I'll rule on it, and then we'll proceed on it. And if the witness doesn't understand, the witness can certainly request clarification if he doesn't understand what you're talking about.

Q Alright, now, I must reconstruct the scene so we know what we're talking about, Mr. Knight. You told me now that as to Exhibit 18-D in peaking capacity, the area, which I take to mean the

Pacific Northwest and Washington and Oregon and possibly even Idaho and parts of Montana; but in any event, the general area does not have a shortage of capacity in the years 1982 - 1986. Now I direct your attention to your Exhibit 18-C and ask you how you intend to supply the yellow parts of that Exhibit as to energy in those same years?

A The yellow parts, of course, is the equivalent of Colstrip 3 and 4. In the absence of Colstrip 3 and 4, the only alternative we see is to construct combustion turbines and operate oil-fired turbines to cover that deficiency.

Q So, what you're saying is in peaking capacity, there is no shortage in the area; but that in energy production, the area cannot produce enough so that you could buy the amount shown in yellow on Exhibit 18-C. Is that your testimony?

A That is correct.

Q And then I think you testified that you could put in turbines that could create that much energy for your company in those years; is that correct?

A That would be the route we would go in an attempt to put in the turbines, yes.

Q And, as to the peaking capacity, I believe your testimony was that you wanted to participate in Colstrip 3 and 4 because you preferred to own that capacity rather than to have to buy it; is that right?

A We're participating in Colstrip 3 and 4 primarily for the energy development of that plant. We need the energy.

Q Your company, historically, has bought a great deal of power; isn't that true? That is, you've bought a great percentage of your capacity for a number of years?

A Yes, sir.

Q And is it your testimony, here, that you can't buy the capacity shown to be needed on Exhibit 18-C in 1982 - 86?

A 18-C is not capacity, that's energy, Mr. Graybill.

Q Alright, the energy; that you can't buy the energy needed in that period?

A That's correct.

Q But you can buy the peaking capacity?

A If the plants are installed as originally programmed on the hydroplants, there will be capacity available to meet the peaking; yes.

Q Alright. Now, then, have you armed yourself with a copy of your own annual statement for 1974.

MR. GRAYBILL: Mr. Bellingham, he ought to have a copy of Montana Power's statement for 1974; if he doesn't, I can show him mine. It's Exhibit --

HEARINGS EXAMINER: 115-A, Montana Power.

MR. GRAYBILL: Yes, 115-A.

Q Mr. Knight, Mr. Shenker reminds me that the latest West Group Forecast, dated February 1st, 1975, shows that from 1983 forward that there is a surplus of energy. Do you agree with that or do you want to see this chart; in the area?

(Mr. Graybill gives document to witness.)

Now pointing that chart out to you, I'll ask you again whether you disagree with the West Group Forecast or whether, in fact, there is an energy surplus in the years 82-83 on?

A That doesn't agree with what I'm looking at here, but if I had a chance to study it, I can probably find what it is.

Q Well, alright, why don't you do that maybe over the noon hour. But, in any event, the West Group Forecast does show that in 1883 the area is not deficient; right?

A 1983.

Q Now, then, in your statement, Mr. Knight, you point out on page 2 that your company has 386,383 residential customers; and I note in your annual statement on page 26 that your annual statement reveals that these residential customers pay an average rate per kilowatt hour of 1.44 cents. That's in the first column on page 28, about 8 items from the bottom. That is correct, is it not?

A For the year 1974, yes.

Q What do you mean by average rate per kilowatt hour, if you know?

A I'm sure it's the kilowatt hours divided by the number of dollars -- rather the number of dollars --

Q In other words, it isn't an average of a different rate schedule; it's the average that they're paying?

A Yes.

Q And now in the Montana Power's annual statement for the same year, 1974, on page 12, in the first column, the bottom figure says that their average revenue per kilowatt hour from the residential electric service, is 2.46 cents per kilowatt hour. Does that mean that Montana Power customers pay 2.46 cents per kilowatt hour while your customers pay 1.44 cents per kilowatt hour average?

A That would be my interpretation.

Q Now, Mr. Knight, I want to show you a page from the petition of the Montana Power Comapny for authority to increase rates and charges, which petition is being heard at this time in Montana concerning a rate increase. I just want to show you.

(Mr. Graybill gives witness document.)

I wonder if you would read into the record the residential rates there that the Montana Power is asking our Public Service Commission to charge Montana residential customers in the future?

MR. BELLINGHAM: We object on the ground that an improper foundation has been laid, it's incompetent and immaterial and there is no appropriative value.

HEARINGS EXAMINER: What's your objection on the foundation, Mr. Bellingham?

MR. BELLINGHAM: The assumption that this is a page of the application. It hasn't been testified to, in fact, that it is other than the statement of the counsel. There is no clarification of it.

HEARINGS EXAMINER: Well, why don't you lay some further foundation. I'm not certain --

MR. GRAYBILL: Alright, Mr. Hearings Examiner, this is the application of the Montana Power Comapny to the Public Service Commission, which was supplied to me by Mr. Bellingham and his colleagues in answer to the request for -- or for motion to produce #20 by my client, the Northern Plains. It is so tagged on the front of the booklet. It is exactly the Public Service Commission papers that they served on us in this case after we made demand for them. Now, I don't know if he wants, you know; I suppose we could call somebody to verify that. All I really want him to know is what figures the Montana Power is asking for.

HEARINGS EXAMINER: Well, could you give us the date of the application?

MR. GRAYBILL: Yes, it's right on the front, Mr. Knight. Would you read the date?

WITNESS: Filed on March 12, 1975.

HEARINGS EXAMINER: Very well. The objection is overruled; you can testify.

A Your request is that I read a portion of this, Mr. Graybill?

Q Just read the rates per kilowatt hour that the proposed residential customers will pay in Montana.

A The first 20 kilowatt hours or less per month for $1.71. Next, 80 kilowatt hours at 5.43 cents per kilowatt hour. The next one, 100 kilowatt hours per month at 3.8 cents per kilowatt hour. All additional kilowatt hours per month at 1.9 cents per kilowatt hour.

Q Now, Mr. Knight, the application -- the testimony -- of the Montana Power witnesses in that case, which testimony was served on me yesterday by Mr. Bellingham as, I guess, an exhibit to come later; I don't know what it is. Anyway, a copy was given to us. It shows that this amounts to 22 percent plus -- 22+ percent -- increase in the residential rates in Montana; and I did the mathematics of applying a 22 percent increase to the last year's average of 2.46 cents average kilowatt, and I found that that makes the average kilowatt in

Montana, if the increase is granted, 3 cents per kilowatt hour. That would indicate, would it not, that your company is able to sell the power that it -- it is able to hold out for sale to your residential customers, the power in Washington for about half of what the Montana Power hopes to charge for its residential customers in Montana; is that so?

A Well, I'm not sure that's necessarily so without looking in more details. The average rate in 1974, of course, for ours was 1.44, but we did receive a rate increase in 1974, such that there was -- such that the average rate became 1.55 at that particular time. We are in for another rate increase now which is equivalent to a $36 million increase. So what the end result of the level of Montana rates and our rates are, I do not know.

Q Well, let's examine that a little bit. How -- what was the percentage increase of your 1974 rate increase, if you know?

A It was in excess of 20 percent, as I remember.

Q And it ran the average rate from 1.44 cents to 1.55 cents?

A Yes, but it came in two blocks with an interim increase, I think, of 10 percent, and 12 percent later on in the end of the year.

Q I see. And then if the Montana Power got a 22 percent increase on its rates, its residential rate would be about 3 cents per kilowatt hour; that would still be about double your residential average; isn't that true?

A It would be more like 30 percent, if we are granted our present request for rate relief.

Q I see. How much are you asking for this year?

A Twenty-five percent, approximately.

Q So yours would go to something like $1.80 or $1.90 if you got your 25 percent increase; right? I shouldn't say a dollar -- 1.9 cents per kilowatt hour?

A In that area, yes, and this depends on what the rate structure is.

Q I just want to understand this situation clearly. Part of the power that you would get from Colstrip would eventually be sold to residential customers; right?

A Or equivalent power, yes.

Q So, your company is operated in such a manner that you're able to sell -- well, let me ask you this -- is Puget a profitable company?

A Well, yes, we have to pay dividends on our stock.

Q And you are paying them?

A Yes.

Q So you're able to operate your company in such a manner that you can sell power produced in Montana for, let's say you get your increase, at 1.9 cents per kilowatt; whereas the Montana Power Company apparently, according to its application, needs to make about 3 cents per kilowatt on that same power; is that correct?

A I don't really think that's the right interpretation because what we have to sell the Colstrip power for and all the other power, if for the cost of that power. The fact that there are other costs on our system that may be different from what Montana's costs are, our transmission system and our distribution system, is far more concentrated. But the power that --

each block of power that we have on our system, our customers pay the full cost of that power.

Q Surely. I understand that and I understand that you are a profitable company; and I'm merely inquiring into what seems to me to be the obvious fact that you, because of the nature of your company in Washington, are able to sell your power to your residential customers at somewhere between 30 and 50 percent less than the Montana Power is able to sell it in Montana. I'm merely asking if that isn't the fact?

A I'm trying to explain that the cost of that kilowatt hour -- those costs -- are for other costs rather than for costs of the power; the cost of transmission, the cost of distribution. Our service area is probably less than a thirtieth of the size of the service area Montana Power has. But it's those costs that are the difference, not the difference in the cost of the power -- the raw power.

Q But it allows you to give to the Washington residential power user, Montana power at a greatly reduced rate from what Montana citizens pay for that same power; doesn't it?

A Not for the raw power, it does not. But their costs for their transmission and distribution and those other things are different; and the other resources that we have are mellowed together.

Q But you do agree with me that even if you get the rate increase, that your residential customers will pay a lot less for power than our residential customers in Montana; isn't that true?

A That's true; they're paying for different items.

Q And that might indicate that you have the resources -- in other words, if you charged the same as we, you would have the resources to do differently than you're doing in buying the power in Montana; isn't that so.

A We charge only what the Public Service Commission allows us to charge.

Q And your charges which your Public Service Commission allow, as compared to Montana's charges, Montana Power's charges, which its Public Service Commission allow, makes it possible for you to sell residential power for somewhere between a third and a half of what we have to sell it for in Montana?

A It's a difference in the cost of the system. A comparison of Montana with Consolidated Edison in New York would give you the same results only differently.

Q Yes, I don't doubt that that's true. What I'm examining into is the relative need of Montana customers to build a plant in Montana, the Colstrip plant, which is also partly at our expense, in order to perpetuate a rate advantage that customers in the Pacific Northwest, particularly in the State of Washington, seem to have. Why couldn't you have built a plant in Washington to produce the power that you're going to get at Colstrip?

A Well, of course, we are constructing a number of plants in Washington. We're constructing 7 or 8 nuclear plants in the State of Washington; but it's a combination of all your resources that's necessary in order to make up the total requirement.

Q Well, the fact is that it is possible for you to produce the power in the State of Washington by building plants out there, isn't it?

A But we are building plants out here, yes, indeed. We have hydro plants and we have thermal plants and we are constructing nuclear plants.

Q So it is possible for you to build the plants in the State of Washington to supply your customers; isn't it?

A That's right, but it's not possible to build a base load plant in the time and frame that we're looking for the Colstrip 3 and 4 plant to be available.

Q But it would have been had you planned to build it there in the first place; wouldn't it?

A Probably.

Q So there really isn't any reason you couldn't have built enough capacity to supply your customers in your own area, is there?

A If we had no inter-connection and no relationship with Montana, Montana had been a separate country, that probably would have been the case.

Q So the siting of the plant in Montana is not because you couldn't have sited it in Washington, is it?

A In retrospect, looking behind ten years, if the planning had been done differently, it would have been done differently.

Q Does that mean that the answer is no?

A I'm not sure.

Q I don't understand your answer. I'm asking you if, in fact, you could not have sited the plant in Washington just as well as in Montana as far as you're concerned? Were there any reasons that you couldn't site it in Washington?

A There are reasons why it would not have been prudent because of the economic differentials.

Q You mean it might have cost you more to site it in Washington than in Montana?

A Well, I'm sure that if it had been sited -- been planned to site it in Washington, it may not ever have been built. We are going on a nuclear program in Washington rather than a coal program.

Q In other words, you might not have needed it if you hadn't sited it in --

A No no, it's not a case of needing it; it's a case of what we put together all the resources, what are the alternatives, and we selected the most feasible and the best alternatives in order to meet the load requirements of the region. It's a regional thing, not necessarily individual companies then.

Q And is one of those reasons to use the coal that Montana has?

A One of the reasons to cut down power costs, yes, is to use coal.

Q And is one of the reasons that the Montana Power owned that coal and could therefore build a plant there and use it?

A Well, yes, there was an availability of coal. The same with the plants built in Wyoming; there is an availability of coal. That's very important.

Q Now, your company, does it own any coal mines?

A We have an interest in a coal plant in Centralia, Washington, yes.

Q Is there enough coal available at Centralia to build another plant?

A No. There's enough for the plant that is there.

Q But there is not enough for another plant?

A No.

Q Has any coal been imported into Washington or Oregon to build a coal-fired thermal plant?

A Not to my knowledge.

Q Is any going to be?

A Well, I understand there's a plant proposed in Eastern Oregon in which coal will be imported to that plant.

Q Mr. Knight, is there any reason that you couldn't have imported coal into Washington to build another plant in Washington?

A There's no reason it could not have been done; there is a reason why it should not have been done though.

Q Would it have cost more?

A Yes.

Q And so that might have made your rate go up?

A Yes.

Q Your Public Service Commission surely would have let you cover your rate, wouldn't they; cover your costs?

A We always hope that they will allow us to do that.

Q So at a greater cost, it would have been possible to build a plant in the State of Washington and move the coal to the plant; is that true?

A There's a physical possibility, yes.

Q Was that possibility considered by you before you came into the Colstrip project?

A It was considered, and the economics and the other things involved, it wasn't the prudent way to go.

Q Well, now, when you say the economics, you mean it would cost more?

A Of course it would cost more.

Q Why would it cost more to build a plant in Washington and move the coal to it than it would cost to build a plant in Colstrip and move the power?

A Well I think there's going to be testimony on that fact that it does cost more to move coal than it does to move electricity.

Q Now I understand that your company did some coal rail studies; these were in the State of Washington, isn't that right?

A The studies were in the State of Washington?

Q Were they for coal movements within the State of Washington?

A I think the ones you're referring to are with respect to our hearings on our nuclear plant, yes.

Q Did you or anybody in your company, ever contact Burlington Northern about moving coal from Colstrip or Eastern Montana to Washington?

A Specifically, I do not know, but I assume that they did.

Q You think someone in your company did this?

A Yes.

Q Is that your testimony?

A Yes, I don't know specifically.

Q You really don't know that that was done?

A No.

Q So I'm sure you don't know what the Burlington Northern told you that it would cost; you haven't any figures on what it would cost to move coal from Colstrip to Central Washington or your area, do you?

A Not at hand, no.

Q You haven't ever seen them, have you?

A I have a recollection that they were using in the calculation of 10 mills per ton mile; but that's only a recollection of that regulation.

Q There really isn't any reason that a plant such as Colstrip 3 and 4, a 700-megawatt coal-fired plant, couldn't be built in the State of Washington, is there, physically?

A I don't know of any physical reasons; there may be, but we -- I haven't examined it.

Q Does Washington have a Siting Act like Montana?

A Yes, they do.

Q Does it -- do you know whether it's easier or more difficult to build plants in Washington than it is in Montana; do you have an opinion as to that?

A Well, we've been before the siting counsel in Washington for our nuclear plants. So far we haven't gotten a determination on the nuclear plants. There is, I think, two plants that they have approved -- two nuclear plants.

Q What about your Skagit Plant?

A It's -- the hearing is over with and they are deliberating on it now, and they haven't made a recommendation as yet.

Q So, in other words, the whole process that we're going through here has also been gone through by your company in the State of Washington relative to Skagit; is that true?

A Similar process, yes.

Q So your company is as familiar with doing that as the Montana Power who are handling this hearing are here; is that true?

A Generally, yes.

Q And your siting authority, whatever it may be, is as familiar with these type of problems as Montana is because it has been presented to them by you and other companies; is that true?

A I assume so.

Q So the siting problem could have been taken to a Washington siting authority just as easily as a Montana siting authority?

A Well, had it been planned at the proper time, historically.

Q Right. But you pointed out to me that it might cost more to build a plant over there?

A Yes, I'm sure it would.

Q And that might have raised your rates?

A Well, that's the result.

Q Of course, your rates are lower than ours now; right?

A Yes.

Q But it was an advantage to your utility to participate in the Montana plant because the cost might be less; is that a fair statement?

A Well, it's an advantage to us, yes, because the costs are down. But then, it is an advantage to Montana that we are a partner because their costs are down.

Q Well it surely is not an advantage to your company that you have to transport the power all the way from Colstrip to Washington, is it; that's not an advantage, is it?

A It's an advantage relative to the alternatives.

Q Relative to a nuclear alternative?

A No no, relative to transporting the energy by a different method; by rail. The energy goes on the grid and then it flows where the loads are.

Q Of course, there is some energy loss in transporting it?

A Yes, there is some. At other times, though, there may be a negative loss.

Q Is it an advantage to build in Montana over some of the hydro alternatives that you discussed with Mr. Shenker yesterday in the State of Washington?

A There are no hydro alternatives for energy that I discussed with Mr. Shenker. Those were capacity alternatives. There are capacity -- places to increase capacity, but energy -- the amount of energy is very minimal that's available in those increases.

Q Alright. The Montana Siting Act requires that the applicants take certain steps to investigate alternative sites, and I merely want to inquire whether you or your company did that investigation or whether you left that to others in the combine?

A It was left to others.

Q Okay. And to your knowledge, did the consideration of alternative sites which you've testified others did, did that, to your knowledge, include other sites outside the State of Montana?

A Not to my knowledge.

Q So you're testifying that the only alternative sites which you know of that were considered for Colstrip 3 and 4, were Montana alternative sites?

A Yes.

Q And the converse to that would be that no alternative sites in

Washington or Oregon were considered when deciding where to site Colstrip 3 and 4?

A Yes.

Q Okay. On page 2 of your statement, you list the different classes of customers to whom you sell power and from whom you make electric revenues, and you tell what percentage is residential, what percentage is commercial, what percentage is industrial; and then your statement says, and 7.1 percent from others. What do you mean by others?

A I think that is wholesale for resale.

Q Well, what customers are you talking about when you say "others" that you've sold power to?

A Well, we have a number of customers like the Port of Seattle, which is a wholesale for resale customer; many ports and marinas and that type of thing, which are -- and others which are maybe certain public authorities that are --

Q What do you mean by "public authorities"?

A Oh, the capitol building, for example, of the State of Washington.

Q So, you're testifying that the 7.1 percent that is neither residential, commercial or industrial, is other public bodies, but not utilities; is that right?

A There may be secondary power sold to other utilities, which is wholesale for resale.

Q In other words, you may have sold power to other public utilities?

A Yes.

Q And that may be part of the 7.1 percent?

A Yes.

Q Do you have, under your charger and obligation, to sell power to the customer of other utilities?

A Obligation, no.

Q You certainly have an obligation in your area, I suppose, by your franchise, to sell to resale residential and to commercial and industrial customers that live in your area; don't you?

A And wholesale for resale within our area.

Q But do you have an obligation to sell to other utilities so that they can sell to their customers under your charter?

A Not under our charter; under the Northwest Corps of Nations, we, of course, we do operate the total hydro systems such that if one utility is short and we are long, we are obligated to transfer that power to them on an interchange basis. In the event that we need it back, we have the right to get it back. In the event we do not need it back, they have the right to purchase it.

Q But what you're telling me is that while your state charter doesn't require you to and the Public Service Commission doesn't require you to, you have contractual arrangements with other utilities that require you to sell or buy power from them under certain circumstances?

A Yes.

Q So, what you're also saying is that part of this 7.1 percent of the power that you sold last year, really isn't going to customers, it's going to other power companies; is that right?

A That's probably true.

Q And have you included that in your charts, Exhibits 18 and following here? In other words, is part of this demand that you're talking about, part of your load on Exhibit 18, for example?

A No, it is not.

Q It's not in there.

A No, it is not.

Q Well, now --

A This is a secondary operation. If we have excess water at certain times, we can displace somebody else's power costs.

Q Well, I'd like you to examine your Puget Annual Report from 1974, particularly page 28, and it shows that you sold 11 -- I don't know, million or billion -- 11,771 kilowatt hours; do you find that figure, about 10 from the bottom of the total energy sales?

A Yes, sir.

Q I looked at your Exhibit 18 and I found a point half way between 73 and 74 where I thought that's what you meant, but that isn't what you meant; in other words, the 11.771 figure is not directly reflected on Exhibit 18; is that right?

A If you look at the note at the bottom of the page, it gives the number of kilowatt hours that were sold to other utilities, surpluses that we had; steam generation on our old steam plant that were generated in 1973 that were accounted for in 1974, that supplied power during that extreme power shortage period that we had in 1973.

Q What I'm trying to find out is, in this Exhibit 18, in the blue area, the bright blue area, is any of that power represented in the bright blue area?

A No, it is not. None of that power is represented in that area.

Q And is any of it represented in the yellow area?

A No, it is not.

Q Bright yellow?

A No, it is not.

Q So it's not represented here at all?

A That is correct.

Q Now that's interesting to me because your chart here, Exhibit 18, shows that your actual average energy growth, your actual peak energy growth, in both cases, is 8.1 or 2 percent growth; right?

A Yes.

Q In other words, it shows that you're growing 8 percent plus a year; right?

A Historically, we have done that.

Q Historically, yes. Now I noted your president, or maybe it isn't the president, maybe it's after his message; I noticed that on page 6 of your annual report, under power sales, quite a bit is made of the fact that you had a marvelous year in selling surplus energy in 1974. It says, "The company was able to sell considerable amounts of electrical energy to utilities in other areas," and it says, "principally in the southwest, which rely heavily on colossal fuel generating plants. Without these large sales of surplus energy, the company's kilowatt hours sales gross would have only been about 1 percent." Are you telling me or does this mean that although you projected 8 percent growth on this chart, that in the year '74 it was, in fact, 1 percent, barring these sales to utilities?

A On that chart for that year, we did not project a percent. The 8 percent is a historical growth that has happened. The 1974 load, of course, was down from our previous projections prior to the time the conservation effort had taken over and prior to the time that we had the extreme power shortage in the Northwest in the fall of 1973 that ran into 1974. The actual customer blind growth was one percent. Our actual kilowatt hours that we had to generate for that load was not one percent, it was approximately 3 percent, as is in my testimony. The difference in that number, the difference between the actual kilowatt hours that generate per a customer load and the fact that when we read meters, we read meters only every other month, or many of the kilowatt hours are delivered in December and are accounted for in January of the following year, so you do get that differential.

Q Alright, now, Mr. Knight, I understand, because I heard you say it to Mr. Shenker and I thought it unusual at the time, that you don't claim the 8 percent applies to any given year, it's the trend over the whole chart; isn't that the idea on Exhibit 18?

A The previous trend, it's not our projected trend.

Q Well, the projected trend is 6?

A That is correct.

Q The projected trend is 6, but the historical trend is 8 according to the chart. But the fact of the matter is that in 1974 the trend was one; isn't that true, according to your own annual report?

A The trend was about 3.1; it is indicated in my testimony. The one percent is the billed customers, and we generate on the gross that we have to deliver. We supply resources on the gross.

Q The fact is that you only sold one percent more in the accounting period of the year; isn't that right?

A We actually delivered the 3 percent in gross.

Q Now you and I would agree that what you don't pick up one December because of your billing on a bimonthly basis, would tend to even off with what you picked up the year before in December, wouldn't it?

A Yes, and perhaps I should explain that to you. For example, in 1974 our gross delivered only amounted to 7.45 percent, where our billed was increased at 7.8 percent. So it switched the next year. The bill was actually greater than what we delivered. So, this year, as I say, was 7.8 percent relative to the projection of 6.1.

Q So even though your annual report shows the total energy sales up 26.3 percent, the fact is that if you dropped out the energy that you sold to other companies, the total energy sales were only up one percent in 1974; isn't that true?

A The sales delivery was up 3 percent.

Q And, Mr. Knight, I understand what you say; do you understand what I'm saying? In other words, when I ask you a question about sales, then I'd like you to answer in terms of sales; and then when I ask you a question about deliveries, I'd like you to answer in terms of deliveries; and if your counsel wants to, he'll be glad to give you an opportunity to point out that deliveries are up 3 percent. But so that I can make the transcript read intelligibly to the people who might read it, when I ask you a question about sales, will you please try to answer in terms of sales, and if I ask you one about deliveries, then you answer in terms of deliveries. Do we understand each other?

A I think we do if you're interpreting sales to mean collection of money, where I interpret sales as when we deliver the kilowatt hours to the customer.

Q Well, now, Mr. Knight, I'm not trying to interpret anything; I'm trying to let you explain it to me, but I'm reading a paragraph from your own annual statement which says, that "without sales of large surplus energy," which it said in the paragraph before went to other companies, "the company kilowatt sales growth would have been only about one percent." Is that true or is the annual statement wrong?

A That is true as to billed kilowatt hours.

Q I see. Okay. Thank you. I understand that your company owns 50 percent of Colstrip 1; is that correct?

A That is correct.

Q And, how do you propose to move the power that you own from Colstrip 1 and 2, which is 50 percent, to your area -- your distribution area?

A In effect, it will be wheeled across the Montana Power's transmission system to their interconnection with the Bonneville Power Administration, in connection to Anaconda and Hot Springs. That location, then, is exchanged to Bonneville Power for an equivalent amount of power at our interconnection with the Bonneville Power Administration on our system.

Q Do you have a contract -- a written contract -- which says you own 50 percent of Colstrip 1 and 2 plant?

A I have an ownership contract, yes.

Q And awhile ago you said that it would be a lot cheaper for you to move the power to Washington by transmission line than it would be to move the coal; I understand that to be the sense of your testimony a few minutes ago?

A Yes.

Q Do you have a contract -- a written contract -- to move power from Colstrip 1 and 2 to your area?

A I have, yes, written contracts. I do not have signed contracts; they're still under negotiations, the details of the contracts.

Q Have you used any of that power yet?

A Yes.

Q You mean you have used the power and you haven't got a written contract covering it?

A We do not have a signed contract as yet; the contract is still under negotiation. Yes, we move power.

Q Is it your custom to sell and buy electrical power before you have a contract -- a signed contract?

A We do that very frequently. Bonneville has a general excess capacity; a wheeling agreement with everybody that they will wheel power if they have excess capacity. We do in our system, so we do whatever we can to maximize the facilities that we have in operation.

Q I'm not concerned about the transmission system; I'm concerned about the little legal problem of dealing with someone in large figures without having a signed, written contract. We have a statute in Montana that says that any contract for over $500 must be in writing. Now the penalty isn't that you go to jail; the penalty is that it's not enforceable. But, are you telling me that your company does not reduce to writing its contracts that involve more than $500 in the power exchange business?

A Generally we reduce them to contracts, depending upon the situation. And these will be in formal, signed contracts. They are not -- we are still negotiating those contracts.

Q Depending on the situation, huh?

A Yes, because a lot of times, $500 you know, this is routine to operating. If somebody needs some power tomorrow morning and he's in trouble, certainly we don't sign a contract before we'll pick up a generator to supply his power. We do it.

Q I'm not telling you how to run your company; I'm telling you it's not enforceable if the other party doesn't want to enforce it in Montana. You know, that's just --

A It would be if you asked him to do it the second time, though.

Q Well, I understand that. But I am a little bit shocked that you would transfer large amounts of power without a written contract; and by a written contract, I mean a signed, written contract.

MR. BELLINGHAM: We move that the gratuitous statement relative to written unsigned contracts just made by Mr. Graybill be stricken.

HEARINGS EXAMINER: Sustained.

MR. GRAYBILL: Well, I want the witness to understand, if you're trying to wipe that out of the record, I want him to understand that by written contract, I mean a signed written contract. I'm not interested in just having a contract.

Q Why haven't you got a written contract to move the power from Colstrip 1 and 2 to your area yet?

A Well, I'm sure it's merely a matter of press of other things. You know, we prepare a draft and get together, and a few months later we do it again. Bonneville right now is preparing rates for wheeling and they haven't come to a conclusion yet with respect to what their wheeling rates are going to be. So it's in an interim; but the power is being taken care of on an interim basis.

Q Mr. Knight, this is a strange situation. You mean that since 1971 or '72 when you started in Colstrip, you haven't had time to write a contract as to how to get the power from Colstrip to Washington?

A Well, with respect to joint ownership plant, it has been a case, primarily, of Bonneville working out a method that applies to all plants; and they haven't concluded their studies yet. We've had many discussions with them; they've assured us and they are performing that until those studies are done on rates, and what not, they will move the power necessary.

Q Is it Bonneville that's moving the power from Colstrip?

A From the interconnection with Montana.

Q Well, let's talk about the movement of the power from Colstrip to Hot Springs where the interconnection is. Have you got a written contract covering that?

A I've got a written contract; they have not signed it as yet.

Q Could you supply me with a copy of that?

A I can.

Q Is it your intentions that it will be signed or is there any reason that it isn't going to be signed?

A None whatsoever.

Q It's been negotiated?

A Oh, yes.

Q What does it provide, in essense?

A Well, it provides that my share of Colstrip 1 and 2 will be transmitted across the Montana transmission system to their interconnections with Bonneville at Montana's fully distributed costs, and that includes losses -- we supply the losses on all the transmission lines. That's basically it.

Q You're supplying losses on the transmission lines?

A Yes.

Q All of the losses?

A No, the losses related to our power on the Montana transmission system.

Q Do you pay the Montana Power Company a certain amount per kilowatt for moving that power, or not?

A No, it's related to the capital investment in the facilities.

Q Well, are you making the capital investment in the facility?

A No, they've made the capital investment in the facilities, so therefore we're paying the cost of those capital investments.

Q You're repaying their capital advances; is that right?

A No, the cost of their invested capital and operation and maintenance and all those things that are related to the cost associated with the transmission lines.

Q You're paying them a price -- in other words, you're just paying them a price designed to recoup for them their advanced --

A Full cost.

Q Pardon?

A Their full costs.

Q Full costs or full costs for your half?

A Well, full costs related to our block of power that they transmit.

Q Well, now, I've been assuming in my mind that you were getting half the power from Colstrip 1; is it true that you might get more than half the power from Colstrip 1?

A No.

Q You will never get more than half the power?

A Only if there is some reasons that we exchange both powers. Sometime they may need for their load part of my generation, and if it is surplus to my system or I have an altern, I'll sell it to them, and vice-versa. Those are the only circumstances.

Q Have you discussed buying more of their half?

A No, well, not as buying any; no.

Q Have you discussed exchanging so that you get some of their half of the Colstrip power -- Colstrip 1 and 2 power?

A We have discussed exchanges of power; in fact, we have a contract where we supply them power that, individual months where maintenance outages on their system, they need extra power; and other times when we might need extra power and they have surplus, we make exchanges.

Q Alright.

A Without any dollar transfers. It's kind of an exchange, balancing out each of our resources with our loads.

Q But you do keep careful track of who has more power; right? In other words, you don't give them any power, do you?

A No.

Q Historically, have you given the Montana Power Company more power than you have taken from them?

A I've never given them, as such.

Q Well, have you exchanged power; in other words, has the historical flow been from you to them or has the historical flow been from them to you?

A Well, on the last contract, and that depends on how far back you go, I think the deliveries have all been to them.

Q Have all been to them?

A Yes. Now, in 1974 -- or '73 -- we did have an arrangement with them in which their surplus would come to us. We did not need that surplus; we did make it available to other people in the Northwest.

Q Well, what I'm getting at --

A But, I'd have to look at the individual years.

Q I beg your pardon?

A I'd have to look at the individual years and kilowatt hours exchanged back and forth to know.

Q What I'm getting at, Mr. Knight, is this: I understand that the Montana Power built a line -- 230 line -- from Billings to Great Falls in order that it might wheel some of its power over Bureau lines, which are available at Great Falls, to you or to other companies in the Pacific Northwest; do you know what I'm talking about? Do you know anything about that?

A Well, I know they're building a 230 KV line between Billings and Great Falls.

Q And is one of the reasons so that you can get power over?

A Well, I'm sure one of the reasons is in order for the generation of the two units to be stable, that line is needed.

Q Well, now, I'm not an electrical engineer and I don't want to play games with you, but I really do want to know whether your company and other Pacific Northwest power companies are going to be able to receive power over this 230 line, and if one of the reasons for building it is to get that power to you, rather than merely to supply the rest of Montana Power's personal own intrastate system; and I'd like you to address yourself to that problem and tell me what you know.

A This is the type of question you cannot really answer in the manner that you'd like to have an answer because a system is built to carry the generation that is on that system in a stable manner. There may be all kinds of alternative things that will be built, but the system is being built so that a total of the two 330-megawatt units will stay on line and be stable.

Q And is the 230 KV line from Billings to Great Falls necessary to the stability of that system?

A I'm sure it is necessary or it wouldn't be built.

Q Are you participating in the payment of that system?

A I'm not putting any capital investment in that transmission line, but in the wheeling contract; I pay for their investment they make in their system in order that that power is involved.

Q Who is paying for the capital investment in that system?

A I suppose Montana Power is.

Q And who's paying for the capital investment in the Colstrip to Hot Springs system?

A Are you referring to the system 3 and 4 as designed or 1 and 2 only?

Q Well, let's take it in steps. How about 1 and 2?

A One and 2, the existing system, and Montana is putting up the capital investment.

Q Montana is paying for the 1 and 2 system?

A Well, most of that system is already there.

Q Well, let's talk about the two new double 230 KV from Colstrip to Billings -- to Hot Springs; who's paying for that system?

A They're putting up the capital investment.

Q Now, if Montana Power is putting up that capital investment, knowing what you know about the electrical utility industry, isn't it true that the Montana rate payer is eventually going to have to pay rates based on that as part of its rate base?

A No, because we are paying for the cost of that capital that they are putting in in wheeling of our power.

Q You mean that when the Montana Power comes up with this money in the first place and capitalizes it, that the Montana rate payer isn't involved?

A Yes, but offsetting that is our payments to the Montana Power Company for the wheeling of that power.

Q How many years does it take you to pay them back their capital, Mr. Knight, by wheeling?

A I believe that it's on a 35-year --

Q Alright, now, who puts up the money for the 35 years?

A Montana puts up the money, but --

Q And where do you suppose Montana Power gets its money?

A They probably go to New York and borrow it.

Q And who do you suppose pays the interest on it?

A It's a combination of the rate payers and Puget Power, in this particular investment.

Q In other words, the Montana rate payer ends up paying for the capital structure of the Montana Power; doesn't it?

A To the degree that their share of Colstrip 1 and 2 is on that transmission line; to the degree that mine is on it, my rate payer is paying for it.

Q Are you aware that the Montana Power Company prides itself on building a great deal of its capital plant out of earnings out of operating income? I don't know that your company does, but Montana Power does; are you aware of that?

A I don't follow their capitalization.

Q To the extent that they use operating income for capital expenditures, who would be paying for the rate -- for the lines -- capitalizing the lines that you are going to use; would it be you or the Montana rate payer?

A To the capital investment as dedicated to Colstrip 1 and 2, it will be us.

Q In 35 years?

A We pay the interest and amortization in it every year.

Q You're telling me that your contract will see to it that the Montana rate payer doesn't assume any burden because of the part of the power line that you're going to use; is that what you're saying?

A That's what I'm saying. That's the intent.

Q That will come as good news to the Montana rate payer, if it can be sustained.

MR. BELLINGHAM: Thank you, sir.

MR. GRAYBILL: You're going to leave that gratuity in, huh? I was waiting for your objection, Mr. Bellingham.

Q Well, we didn't quite finish. What about the conversion of the 230 lines to 500, and then the 500 KV line of Colstrip to Hot Springs; who's going to pay for that?

A At the time that it's converted, then the capitalization structure will be divided relative to the ownerships of 3 and 4.

Q And after that there will be no more wheeling costs; is that right?

A There will be no wheeling costs between Colstrip and Hot Springs for 3 and 4.

Q Alright, so it now developes that the fact is that the combine of the Applicants here intend to capitalize and pay for the 500 KV transmission line from Colstrip to Hot Springs in its entirety, once it's converted; but until it's converted, that is, until we get to the 3 and 4 stage, Montana Power is capitalizing the 230 convertible; is that right?

A Yes.

Q And you've agreed to pay off the 230 convertible on a 35-year wheeling arrangement; is that right?

A Yes.

Q And you're going to supply me with a copy of the written, but unsigned, contract under which you're going to do that; is that correct?

A Pleased to do that.

Q Have you -- has your company invested any money in the 230 KV lines?

A Yes.

Q What money has it invested -- I don't mean to tell me exactly what you --

A Well, there are certain things that relate to 3 and 4 that we're investing on.

Q What are those things?

A Well, there's the addition to the ability to transfer these from 230 to 500; that additional cost is being supplied by the other Applicants.

Q In other words, you're putting up part of that cost now?

A Yes.

Q Are you putting up 50 percent of that cost now?

A No, 25 percent.

Q Ah, that means that --

A Our interest in 3 and 4.

Q That means that the other companies who have an interest in 3 and 4 are putting up some of the money for the line, the 230 convertible; is that right?

A That's correct.

Q Have they been doing that all along?

A I'm sure they have.

Q So the fact of the matter is that each of the Applicants has some interest, financial interest, in the 230 KV line from Colstrip to Broadview?

A Well, it's a financial interest in its ability to be converted in the event 3 and 4 is built.

Q Well, and it's a part of the cost of these 230 as built; isn't that right?

A Yes.

Q In other words, it's the difference between wood poles and steel poles; right?

A Right.

Q And it's a difference between right-of-way width that you'd need for the wood poles and right-of-way width that you'd need for the steel poles; isn't it?

A I'm not sure there's a difference there.

Q There's a difference in the type of conductor that you need for the steel poles as against the type you would need for the wood poles; isn't there?

A I don't know whether there's a difference in those individual components or not.

Q Whatever components are different, it's that difference that the five people now have an interest in; is that right?

A Yes.

Q Would you explain to me what you mean by the convertibility of the 230 KV line; what are you talking about?

A The convertibility?

Q Yes.

A It's designed such that it can be altered from a double circuit 230 KV line to a single circuit 500 KV line.

Q And is there any anticipation that that will ever be done?

A It will be done if 3 and 4 are built, yes.

Q And would that necessitate any physical changes in the line to convert it?

A It's a physical change of the wires on the towers; no change in the towers.

Q In other words, the wires are changed?

A Yes.

Q Bigger wires put up or the same wires?

A No no, the same wires.

Q But they're put in a different --

A Different location and different bundling.

Q Configuration?

A Yes.

Q I see. Now, on your prepared statement on page 5, you're talking about your own Exhibit 18-B, I believe; in any event, you state here on page 5 that there are certain contracts under which your company gets their power. The fact of the matter is that your company owns a group of power plants, and then in addition to this ownership, it purchases a great deal of power from other public power companies in the State of Washington; isn't that true?

A Public utility districts, yes.

Q And then in addition to that, you also have certain rights from Canadian storage that you use for power; is that right?

A That is correct.

Q Now, this second group is a group of public utility districts from whom you made a major purchase of power a few years ago; I think the purchase was a 50-year purchase; isn't that true?

A Generally that's what they are, 50 years.

Q And you initially got 1,353 megawatts, and then in 1971, when Rocky Reach and certain other additions were made, you purchased another 353 megawatts from those public companies; isn't that right?

A Well, it's changed historically as those individual plants came on line; and I think the last one you mentioned is the last four units at Rocky Reach when they came on the line; yes.

Q By and large these contracts have a great number of years to run; isn't that true? They were really renegotiated in the early '70's or late '60's; isn't that right?

A Yes. They started with the plant construction and inservice dates of the plants.

Q So that the power that you received by contract from these five agencies really have a long time to run, doesn't it?

A Yes. Except they have the certain withdrawal rights.

Q Now that's what I'm coming to. You say that upon giving proper notice under these contracts, they can withdraw certain amounts of this power; is that right?

A That's correct.

Q Aren't there really serious limits on what they can withdraw though; they can't withdraw it all, can they?

A That's correct.

Q When is the first time that they can withdraw?

A Oh, there has been withdrawals already. In other words, most of the contracts, as such, the only limitation was within the first five years; but they have -- there have been withdrawals at every one of the plants to date.

Q And the withdrawals are limited in amounts, though, aren't they; that is, they can't withdraw it all?

A No.

Q In other words, the contract provides for a basic schedule, and they can withdraw down to that schedule, but if they don't want to, they can continue to let you have it; is that true?

A That's correct.

Q Alright, now, has the basic schedule been completely reflected in 18-B?

A No, 18-B is the withdrawal that they have notified us on.

Q And don't you have several year's advance notice?

A Most notices are on five years. There are adjustments of a five-year notice of adjustment on a three-year and two-year and an adjustment on a one-year notice.

Q So, what do you mean by adjustments?

A Well, for instance, maybe we can think of one of the contracts. They gave us a five-year notice. They have the right to change that five-year notice as a three-year notice, and then the change on a two-year notice, and that sort of thing. In other words, they can zero in on their requirements as they get closer and closer to the time of withdrawal. Otherwise there are -- once they make up their minds five years in advance, they have to stick with it. Different contracts are different.

Q And Exhibit 18-B has already accounted for all the withdrawals that you know of?

A That is correct.

Q And as I understand it, looking at Exhibit 18-B, in the 1975 and '76 year, the first three lines are your load, and then the lines 4 through 24 are your resources; right?

A Yes.

Q And then at the bottom there are some comparisons as to whether this gives you a plus or a minus, that is, whether you have a deficiency or not?

A Yes.

Q And are you telling us that everything is included there on these contracts?

A With respect to withdrawals?

Q No, with respect to the resources?

A Yes, our resources are all in there.

Q Now, one of the plants that you list on Exhibit 18-E is called Rock Island; and the Rock Island Plant, is that a plant that yourcompany is participating in the building of?

A Originally the Rock Island Plant was built by Puget Sound Power and Light. Chelan County PUD condemned it and took it away from us and we do have contractual rights for a certain amount of power out of the plant.

Q Alright, would you show me on Exhibit 18-E, or 18-B rather, where the 410 megawatts that you are going to get from that plant when it is completed in '78, are reflected?

A If you will note the contract hydro on line 5 you'll see the change, for example, in '76-77, the quantity of 1634 and it goes up to 1888 and it goes up to a 1958. And this is the combination of Rock Island coming on the line and combination of withdrawals, and so this is the net.

Q So you're saying that Rock Island is included on that line, the whole 410 is included in that line?

A That's correct, the capacity component.

Q And that the withdrawals are --

A They are in that line too.

Q -- are what keeps that from reflecting the whole 410 addition?

A Yes.

Q Now, in addition to Rock Island, you have an interest in Hanford WPPS No. 1; is that right?

A Yes.

Q Your interest in that is 80 megawatts, 5 percent; isn't that true?

A That's a contract block of power, 80 megawatts capacity, 68 megawatts of energy.

Q Would you show me where that reflects on your Exhibit 18-B?

A On page 2, line 12; '80-81 you'll see the 80 megawatts of capacity, 68 megawatts of energy.

Q Alright, now, a third part of your plant is the result of a Canadian treaty whereby you participated with other Washington utilities in financing some storage in Canada; isn't that true?

A Yes.

Q And from that storage in Canada, you were entitled originally to 242 megawatts and later to 384 megawatts, isn't that right, of power as a result of your capitalization of that project?

A The quantities are right; the situation a little different. The Canadians, of course, sold their power to the Columbia Storage Power Exchange and then we purchased that from the Columbia Storage Power Exchange, and that is shown on line 13.

Q In other words, you don't still get it from the Canadians, but you get it from a company that sort of is the intermediary?

A Yes, that's right.

Q That's called Columbia Power --

A Columbia Storage Power Exchange on line 13. We tend to forget that people don't understand these initials and we should spell that out, perhaps.

Q And why does that line 13 change up and down; why aren't you entitled to 384 megawatts at all times?

A Well the reason is, part of the power that we have under contract is not the power that we bought from -- only the power that we bought from the Columbia Storage Power Exchange, but power that some of the public agencies bought, and we got them to assign that power to us and they have certain withdrawal rights on that power, so they have certain rights to take it from us. There is also some power that has been assigned on a capacity basis by -- of the CSPE -- out of the region that comes back in 1978 which increases the quantity.

Q Well, your 1972 annual report discusses this, and it says that your company has exercised options for withdrawal in April of 1975 of 384 megawatts of power under the Columbia Storage Exchange Agreement. Then it says, "The power available under this agreement, which had been assigned to California utilities, has been purchased from Canada's share of downstream power entitlements on projects in the United States in accordance with the treaty." Did you buy the California power?

A I didn't buy California power.

Q Did you buy California power rights?

A No no. The contracts for the transfer of this power to the Californians had withdrawal rights, and it was drawn back from California. All of it was drawn back in April of 1975.

Q Is any of that power now being sent to California, of the power that you have a right to?

A Well, we periodically have surplus energy and capacity as our water conditions occur, and we do sell secondary energy to California, which, you know, might be this power, might be other power, because it's just a net of power.

Q Do you have any long run of commitment to sell power to California?

A Do I have a long run commitment? No, I do not.

Q In addition to the 384 megawatts of power that you got for participating in this Canadian storage project and the treaty, your 1970 annual report indicated that you would later and by 1975 also receive also an estimated 160 megawatts of dependable power because of your existing power purchase contracts with downstream plants. In other words, isn't there an additional 160 megawatts of power in addition to the storage power which you have a right to, as far as exchanges are concerned?

A That power is on line 5. In other words, due to the increase in the amount of water, the capability of the Columbia plant's generation is greater than it otherwise would be without that additional storage in Canada; and it is the -- the amount of power is in that line 5. In other words, those plants could not generate that amount of power if it hadn't been for Canadian storage.

Q So that additional 160 megawatts is included in line 5 on your --

A Yes.

Q Is that right?

A Yes, it's a different in what it would have been with and without the Canadian storage reservoirs.

Q On page 7 of your statement, you say that -- you point out that a number of these power plants have been delayed throughout the area, and I think you talked to Mr. Shenker about that yesterday. But you say there that it's because of the inability to obtain necessary permits as the first reason.

A What line are you looking at there?

Q I'm looking at line 16 on page 7 of your statement. What I guess I'm asking you is this: You agree, don't you, that many of the power plant projects in the Pacific Northwest have been delayed, not only this one, but others have been delayed; right?

A Yes.

Q And, in fact, I think Mr. Shenker went over with you and I think if you compare your original exhibit showing the construction plants and your present exhibit showing the construction plants, every single one has been delayed at least a year, and some of them maybe more; and you said in answer to questions by him that this was because of the "licensing process"; do you remember that?

A Yes.

Q Alright, now, are you familiar with the fact that the Federal Energy Agency sent a taskforce into the Pacific Northwest last spring or summer to investigate delays in power plant construction?

A I seem to recollect that there were certain Federal energy people in the Northwest, but I don't know if they were related to that particular subject or not.

Q Well they put out a report on October 3rd of 1975, in which they listed the reasons that power plants had been delayed in construction. Were you aware that they had done such a thing?

A I don't recollect seeing that report.

Q Did you know about it?

A I don't recollect knowing about it at this time.

Q In this report they listed finances, I'm not saying in priority order, but they listed three major causes and the first was financing. In your experience, has financing been the cause of any delays shown on your Exhibit 18-E; by that I don't mean the delays are shown, but we know the probable energy dates are pushed forward on this exhibit over your last prepared exhibit, and you have said that this is because of the licensing process, and I'm asking if you know of any instances where financing has been a reason for delaying major power producing plants?

A No, there has not been any delays on this list due to financing.

Q So, at least as concerns this list, you're saying that the Federal agency taskforce would be wrong?

A If they made a reference with respect to this list, right; if they were talking about some other area, other than our area, they may have been right, but not in this area, no.

Q And then the second reason that they described was decline in demand. Now I think you and I, we certainly know that your demand declined in 1974 because you only sold one percent more that year, whereas you've been selling on a rate of 8 percent more every year, so we know that the rate of increase declined. I presume you're aware that it declined for other companies in the Pacific Northwest also in those years?

A For the one-year and two-year period of time.

Q And in some cases even three. I don't need to go over that with you but there have been declines in demand in the Pacific Northwest, at least since '72 to '75; isn't that true?

A Declines in growth, not declines in demand.

Q Well actually there were even some declines in demand in some of the companies, weren't there?

A I'm not sure whether that's the case; it certainly was not true in our system.

Q Alright. Now, then, the Federal Energy Agency's taskforce referenced this as one of the reasons why many of the projects were pushed forward; would you say that this was a wrong reason, would you disagree with them on that?

A I would disagree with that with respect to these power plants, yes.

Q The Rock Island Plant delay, was that because you couldn't get a license from the State of Washington in a timely manner?

A We're not sure the Rock Island will really be delayed, it's only a question of a couple of months because of the delivery of equipment, in that respect, from France.

HEARINGS EXAMINER: Mr. Graybill, we're past lunch. Is it convenient to interrupt your cross now?

MR. GRAYBILL: Let's just finish with Rock Island, about two questions, and then we'll be through.

HEARINGS EXAMINER: Okay. Thank you.

Q Now, in your 1971 annual report, your company projected that Rock Island would be available for 1976, sir. Now I grant you that it's only been pushed forward a few months on your schedule, but from your projection in 1971 in your annual report, it's been pushed forward at least a year and maybe two; and I'm asking you, is that because you've been unable to get a license?

A Well, in that respect, that was a Federal Power Commission in the licensing with; that was a public utility district, yes.

Q And it was the Federal Power Commission that held it up?

A Well, it was the time of getting the license from the Federal Power Commission that was delayed from when we originally expected to get the license; that's correct.

Q So, the Federal Power Commission held a hearing on this?

A I do not believe a hearing was held on that because it was an amendment to the present license.

Q What caused the delay in terms of licensing that?

A Just a process that the Federal Power Commission goes through in granting an amendment, it takes time.

Q In order to be sure that it is properly done, it takes that much time?

A They took that much time, and, of course, the district could not finance until they had the license in their hands.

MR. GRAYBILL: That will be all at this time, Mr. Hearings Examiner.

HEARINGS EXAMINER: Let's recess until 1:30.

(Recess: 12:05.)

Following the luncheon recess, the hearing reconvened at 1:35 P.M. on January 21, 1976.

HEARINGS EXAMINER: You may continue, if you please, Mr. Graybill.

CONTINUATION OF EXAMINATION OF DAVID H. KNIGHT

Cross, by Northern Plains Resource Council

By Mr. Graybill (continuing):

Q Before we recessed, Mr. Knight, we were talking about reasons for delay, and you had said that the reasons for delaying the plants in which your company is involved, are licensing problems, and we had discussed the Rock Island one. Have you had licensing problems at Skagit?

A Yes, sir.

Q And that's before a siting board similar to this?

A Well, before the Nuclear Regulatory Commission also.

Q And what's happening? Are you having hearings?

A Yes.

Q When did they start?

A They started -- the siting hearings, I believe, started in June; they were completed, I think, the 10th of July and the board is still evaluating the recommendations. The Nuclear Regulatory hearings started July 15th and they were adjourned in late August or early September and they have not reconvened as yet because they have requested additional studies to be made.

Q And is the same true of WPPSS one three?

A WPS one, if I'm correct, I believe they have received their license now, or their construction license, and will be, if not having started construction, will start very shortly. Number three is still in licensing procedure with the Nuclear Regulatory Commission.

Q Is it your -- did this licensing process take an inordinate amount of time? Are you saying that it took longer than it should have?

A I think the time was well-stretched out, yes.

Q And this is because the agencies examining these plants were examining environmental type problems, is that what you're saying?

A Those were some of the things being examined, yes. That's being examined. Site suitability, and all those things are being examined.

Q I see. Were there construction permit examinations, too; in other words, the way the plants would be built and that sort of thing?

A That's the certification we're looking for is the construction permit.

Q So what you're saying is that these are in Washington, is that right? Washington state?

A Yes.

Q What you're saying is that -- well, let me ask one more question -- is the nuclear inquiry all in Washington state, or is part of it in Washington, D.C?

A Well, the hearings are being held in Washington state by the Nuclear Regulatory Commission.

Q So, you have both federal and state regulatory commissions involved in those plants?

A Yes.

Q What you're saying then is that the State of Washington has seen fit to examine into the siting of these plants the same as the State of Montana has?

A I'm sorry, sir, I missed that. Could I ask you to repeat it, please?

Q The State of Washington has seen fit to examine into the siting of these various plants the same as the State of Montana has?

A Yes, sir.

Q And the federal government has also seen fit to examine into the siting of these plants?

A The nuclear plants, yes, sir.

Q The nuclear plants. The issues they are raising are environmental issues similar to those raised here and also air and water quality issues?

A Yes, sir.

Q So, Montana is not the only state that is concerned about this problem of environmental impact of this type of power plant, is that right?

A That is correct.

Q And although you don't have a coal-fired plant in process in the State of Washington, is it your understanding that that also applies to coal-fired plants in Washington?

A Oh, yes, the siting law applies to coal-fired plants.

Q All right. Now I notice on page eleven of your statement that you said the practicality of development, such as drilling, construction of power plants and associated pipe lines and transmission lines to load centers in these environmentally sensitive areas is uncertain. And you were talking about the area in which your company operates, the Cascade mountain range, and so forth, isn't that true?

A If you'd point out the line that you're referring to?

Q Well, lines four to eight, I read that sentence.

A That's relating to the geothermal areas which are -- many of those are in national forests and wilderness areas.

Q Are there other areas -- are the areas around your distribution area environmentally sensitive?

A All areas are environmentally sensitive to a different degree.

Q Is there any difference in the environmental sensitivity of Montana, as compared with areas closer to your load centers in Washington?

A I don't believe so. The thing is, we're referring to the geothermal areas here which are up against the high mountain ranges which have been designated, many of them, as wilderness areas and the national forest lands.

Q Well, in this case, there's a proposal to build two five hundred KV transmission lines through a mountainous area, namely the Rocky Mountains. You're familiar with that?

A Yes.

Q And it goes through a good deal of federal land, and it goes over a national bison range, and it goes through Indian reservations. Is there some reason why Montana's areas are less environmentally sensitive than the forested, scenic

Cascade mountain range?

A No. And many transmission lines go across the Cascade range today, and more are being planned.

Q Is it these plans that the State of Washington is now looking into in the siting act?

A Not with respect to transmission lines, no.

Q There's no siting for transmission lines in Washington? In other words -- is that what you're telling me?

A The state siting laws do not cover the cross-mountain transmission lines that are being built by the federal government, which Bonneville Power Administration are building the base load bulk power supply transmission lines.

Q Well, can you build transmission lines in Washington without going through a siting hearing?

A Yes.

Q So to that extent, at least as far as the transmission line is concerned, you would have been better off to build your plant in the State of Washington than in the State of Montana, is that true?

A No.

Q Not as far as the construction of transmission lines it wouldn't be?

A It all depends upon where the plant is at, what transmission lines you're talking about. It's not a general thing.

Q Well, I understand you to have said that if you built the plant in Washington, that you would have no problem in environmentally siting the transmission lines?

A I did not say that, Mr.Graybill.

Q I see. Well, what did you say?

A I said that we can build transmission lines outside the state siting act.

Q Is there any environmental limits on where you can build transmission lines in the State of Washington?

A Wherever we build lines, we have to abide by the local zoning, the local regulations, all the environmental laws of the state and the federal government.

Q Well, and does Washington have environmental laws that pertain to power lines, power transmission lines, similar to the situation here in Montana?

A Well, lines are directly related to specific power plants, but there are other transmission lines also.

Q And does Washington have laws that limit the construction of such lines until after environmentally conducted hearings?

A We have a number of different laws related to what we do with the right of way, how we clear it, how we reinforce the right of way. Yes, we have environmental laws in the State of Washington.

Q So, in other words, it might be harder to build the line in Washington than in Montana, is that it?

A It might be, it might not be.

Q Did you take that into consideration before you decided to site 3 and 4 in Colstrip?

A Not specifically, no.

Q Over the lunch hour I found the -- I got a copy of the Energy Resource Development Division of the Federal Agency Administration's report to which I referred and I want the record to show that it's dated September 1, 1975. It's a summary report on a survey report of electric utility power plant delays. And, in that connection, I have already explained to you the three reasons that they found to exist nationally: uncertainties of demand, federal and state regulatory policies, and financing difficulties. But you have indicated that in the plants in which you're associated, only the regulatory delay has been a factor in moving these plants forward. Now I wanted to ask you if you would read this statement concerning financing which this federal agency found in its summary report. It says, more than a hundred and eighty eight thousand megawatts of planned nuclear and coal capacity have been delayed or cancelled. Previous surveys have shown that financing problems were the problems -- were the cause of nearly seventy percent of the nuclear plant cutbacks, and forty five percent of the coal plant cutbacks. Sources of long-term external financing continued to be prohibitively expensive due, primarily, to the uncertainty regarding regulatory atmosphere. Do you agree that that is one of the causes of the delays in the plants in which your company is involved?

A I do not.

Q It's your opinion, then, that the nuclear plants shown on Exhibit 18-E at Skagit and Hanford and Satsap must be among the nuclear plants which have no financial difficulty involved, rather than the seventy percent that have financial difficulty. Is that true?

A That is true.

Q Now this report says, in conjuction with demand, the absence of kilowatt hour growth during 1974 has raised profound questions about load requirements in the period 1980-1985. This, in turn, has led to slowdowns or cancellations of planned facilities, which may, in reality, be badly needed by 1985 if the economic picture improves, and if the apparent reduction in the voluntary conservation efforts results in a revival of seven percent historic growth rate in the demand of electricity. Do you agree that this has been a problem in the area in which your company operates?

A No, sir, because we still show, with getting these plants in on schedule, we still will be deficient.

Q Pardon?

A We will be deficient, have an insufficient amount of base load energy.

Q I didn't hear your question. I wonder if the reporter could read your answer back to me?

(REPORTER READS BACK ANSWER)

Q So, the planned facilities in your area have not been slowed down because of the absence of kilowatt growth during 1974, which has raised questions --

A That is correct. They have not been slowed down.

Q Do you have any explanation for why you find the reasons for plant slowdown in your area are different than they are in the rest of the country?

A I'm not at all sure that they are different. The reasons ours are slowed down is one of the reasons others have been slowed down. The other areas may very well be in a different position relative to their resource load situation than we are, which would cause them to do their planning and their construction differently than we do ours.

Q Is it your recommendation, or is it your suggestion that the regulatory practices or policies that you run into in all of these plants that you've talked about should be changed so that you don't have these delays?

A I think it would be very desirable if the time element could be shortened so that we could meet projected schedules. I'm sure that it's very difficult to meet that load requirement if you've got a floating schedule on the generating plant.

Q Would you say that the delays in federal and state regulatory practices are a new phenomenon in your industry?

A Well, it's new with respect to the delays that we experienced when the major amount of the hydroelectric facilities were constructed.

Q In other words, it's different now than it was when you were constructing hydros, is that what you're saying?

A Yes.

Q Do you know why that is?

A Well, there's so many more hearings to go through, is one of the reasons.

Q Wouldn't you agree with me, Mr. Knight, that one of the reasons is that the nuclear and the coal-fired plants bring with them environmental problems that the hydro plants didn't bring?

A Well, they bring different problems, that is true.

Q And wouldn't you agree that recently, by recently I mean the last seven years to ten years there have been increasing public policy interest in the environment and in the results that the coal-fired and the nuclear plants are going to have on the environment?

A Yes.

Q You're not suggesting that the public and our society in general should not be interested in the environmental impacts of coal-fired or nuclear plants are you?

A No, I am not.

Q What you're saying is that that interest is, in fact, one of the causes of the delay?

A Yes.

Q You're not suggesting that the interest in environmental impact of nuclear or coal-fired plants should be ignored, are you?

A No, I am not suggesting that.

Q I see.

MR. GRAYBILL: I think that's all.

HEARINGS EXAMINER: Mr. Bellingham, redirect?

Redirect, by Applicants

By Mr. Bellingham:

Q I have just a few questions. First of all, I think we touched on it but I would like to make certain that it's in in the fashion it should be. Your 1975 total load figure of Puget Sound Power and Light Company, I understand from your previous testimony, that there was an increase over your 1974 figure, am I correct in that?

A Yes, sir.

Q And would you please give us those figures?

A Our total increased delivered kilowatt hours to our customers was seven point four five percent for 1975 over 1974. Our billed kilowatt hours amounted to seven point eight percent over the billed kilowatt hours of 1974.

Q And I believe you explained the difference by the fact that you bill two months late?

A We bill on a bimonthly basis so many of the kilowatt hours we deliver one year are billed in the following year.

Q Now then, as far as your forecasts of loads and resources are concerned, it is my understanding that you are continually updating these?

A We are continually reviewing and updating with knowledge of more information that we have with respect to individual industry growth, the residential growth, anything that we see that we can keep our forecast up to date, we are continually doing that.

Q And changing contracts, for example, would be another change from one forecast to another?

A Yes, resource changes.

Q The reason for continually updating your forecast is what?

A It's to maintain our accuracy and keep ourselves on the road more closely matching our load requirements with our resources.

Q Do you have any figures, as up to 1975, to the percentage of new residential homes which utilized electricity for heating purposes?

A Yes. I assume you're referring to Puget system?

Q Yes.

A In 1975, seventy four percent of the new residents had electric heat. In 1974 it was sixty eight percent. In 1973 it was fifty four percent. In 1972 it was fifty six percent. In 1971 it was fifty seven percent. In 1970 it was sixty five percent.

Q During that period of time there has been a marked increase, hasn't there?

A Yes.

Q Have you made any kind of a study relative to your critical water as applied to Puget system over a period of, say, the last twenty five or thirty years?

A Yes. What we do in evaluating our hydroelectric system, we actually rework on our system each of the individual historical water years. And we find that, although we have a maximum amount of requirement for resources above hydro in a critical year, we find that thirty percent of the other years do require some additional resources because of the shape, even though on an average it looks like you've got kilowatt hours sufficient to meet that year, the beginning of the season, the water conditions in many of those historical years are very similar to what they would be in the critical year. And so we have to put on the additional resources and operate them or schedule our water situation in the event that critical should show up, or otherwise, if when critical would show up, we absolutely could not get through the season and carry the energy load of the area.

Q When does this occur as far as season of the year?

A It primarily occurs in the August through November period, because there are individual years which, as a stream flows, are not greater than they are in the critical period. And it's the flows that come in the spring that balance out the total of the period.

MR. BELLINGHAM: No further questions.

HEARINGS EXAMINER: Further re-cross?

Re-cross by Department of Natural Resources and Conservation

By Mr. Shenker:

Q Mr. Knight, the updating of your forecasts on a continuing basis, I take it, requires the analysis of both load and resource availability, would it not?

A Yes, it does.

Q Can you tell me, Mr. Knight, what percentage of the energy projections for the entire west group Colstrip 3 and 4 would constitute?

MR. BELLINGHAM: I will object to this line of questioning on the grounds it's improper re-cross exceeding the scope of the redirect.

MR. SHENKER: For that matter we have another two hours on the original cross, so let's not be quite so fuddy-duddy about it. It is within the scope of the redirect.

HEARINGS EXAMINER: What was your question again, please?

MR. SHENKER: What percentage of the total west group forecast energy load is Colstrip?

HEARINGS EXAMINER: Well, you can answer the question. I'll overrule it as far as forecasting.

Q Go ahead, Dave.

HEARINGS EXAMINER: He testified that he's continually updating, so I assume it would be connected up in that regard.

A In 1980-81, a total energy resoure amounts to about seventeen thousand five hundred megawatts and Colstrip would amount to one thousand four hundred. And whatever that arithmetic amounts to --

Q That's not the correct series of figures, though, is it, Mr.Knight, because the west group forecast tells us that we're not supposed to count fourteen hundred megawatts from Colstrip; we're only supposed to count that portion that comes into the west group forecast and, indeed, as energy?

A It's eleven hundred, seventy five percent of that, I'm sorry.

Q It's less than eleven hundred also, and it's on the west group forecast.

(MR. SHENKER SHOWS DOCUMENT TO WITNESS)

Q Okay Mr. Knight, we have some problems lining up the figures on the west group forecast chart, but I think we've come up with the figure for Colstrip 3 and 4 together as to the energy contribution that it makes to the west group forecast. Beginning in the first year in which both of those units are available, it's a total of seven hundred and thirty six megawatts, right?

A I think that's correct.

Q Now that's seven hundred and thirty six megawatts out of a total of that year, which is 1982-83, total energy capability of twenty thousand two hundred and twenty nine.

A All right.

Q Now that's about three, three and a half percent?

A Approximately.

Q And if we look on the peak side for the first year in which the maximum from Colstrip 3 and 4 is available, that's nine hundred and eighty megawatts available to the west group forcasted resource, right?

A That's correct.

Q Now what's the total that year of capacity available to the west group?

A Forty one thousand eight hundred ninety two.

Q So that would constitute about two and a half percent of the peak side, is that right?

A Yes.

Q As you continue to update your forecasts, Mr. Knight, do you look at hydro resources that may be available to you?

A Yes.

Q All right, sir. If you do that, then you must know, for example, that in the state of Washington there is installed capacity of twenty two thousand three hundred and fifty five megawatts still to be developed, right?

A No. I do not know that.

Q You don't know that. The figure you gave me yesterday was nine thousand megawatts of hydro still to be developed, is that right?

A No, that was not the figure I gave you.

Q What was the nine thousand megawatts of hydro that you were telling me about yesterday?

A I told you that there was approximately seven thousand on the planning board to be developed now in the schedule.

Q Now being planned for development?

A In schedule for development. They're authorized.

Q The current installed capacity in the state of Washington is twelve thousand three hundred and sixty three megawatts, correct?

A In capacity?

Q Yes, sir.

A No, that's not correct.

Q How much is it?

A Twenty three thousand one hundred and ninety four.

Q Now that's of all hydro sites in capacity developed in the state of Washington?

A Well, it's not all in the state of Washington. It's in the west group area. Some of it's Oregon --

Q Ah, that would include Oregon and some of Idaho?

A Yes, and some of western Montana.

Q Some of western Montana, too?

A Right.

Q You don't know the figure offhand for what is currently installed in the state of Washington?

A No, sir.

Q But you disagree with the figure of twelve thousand three hundred and sixty three megawatts there?

A I can neither agree nor disagree without seeing where the figures come from.

Q Do you agree that the Federal Power Commission hydroelectric power resource book is authoritative?

A I don't know. I haven't seen the report.

Q You've never seen the report of the Federal Power Commission on hydroelectric power resources of the United States?

A Well, I've seen a number of reports. I don't know which one you're referring to.

Q You are still largely a hydro system, are you not?

A Yes.

Q Don't you send in reports to the FPC that give them data as to how your hydro power units are doing?

A Yes, sir.

MR. BELLINGHAM: What is the date on that? 1-71?

MR. SHENKER: '72, I believe is the most current one that I have here, Bill. "72 was the most current one I have here.

Q I didn't have my book with me yesterday when we were talking, Mr. Knight, but I was asking you whether you'd be surprised to find that Washington had more installed capacity, either developed or undeveloped than Alaska. Do you want to look at the book with me or are you willing to accept that?

A That I'd be surprised to know that, or what?

Q Yeah.

A I have no idea what the undeveloped hydro capacity is in

Alaska. I know they certainly have very little developed to date.

Q In updating your forecasts, Mr. Knight, have you been, as a customary matter, supplying information as to new forecastings to Dr. Kanu Shah of the Commonwealth Associates?

A Yes, we have not changed any of our forecasts since the data that we supplied to him last spring.

Q Well, he came out to visit with you in your offices last spring. Now since that time, your representatives, if not you personally, have submitted additional data to him, either by telephone or correspondence. Whenever you have new load forecasting information, as a matter of practice, would you have submitted it to Dr. Shah?

A Yes.

Q Then Mr. Bellingham asked you to read some figures off your note pad on the percentage of new residences which are electrically heated over the years from 1970 through 1975?

A Yes, sir.

Q Where did you get those figures?

A They came from our rate and marketing department.

Q Did you call them up over the noon hour?

A No.

Q How did you happen to have them written down on that pad to read them off from?

A I got them on the telephone two days ago.

Q Two days ago. You've got to do something while you're sitting around here, huh? Mr. Bellingham's question to you was, that's a marked increase, and that's what lawyers call leading questions. But I think the perhaps more accurate reflection is that that's an increase except when it's a decrease, isn't that true? If you look at the years 1970 to 1971, that was a decrease. 1971 to 1972 was a decrease. 1972 to 1973 was a decrease. And then in 1973 it started to come up to the point where in 1974 it exceeded where you were in 1970. That's the way the lines move, right?

A And 1975 was substantially above '74 and substantially above any of the other years.

Q Now I want to ask you what that means to you, Mr. Knight, when you see that you have seventy four percent of all new residences being electrically heated in your service area in the state of Washington? I'm from your part of the country and we have similar economic concerns there with respect to housing starts. They've been down in Washington and Oregon lately, haven't they?

A They haven't been down in 1975 in our territory.

Q Really? What were the number of new housing starts commenced in 1975 as compared to 1972?

A Our new customer hookups in 1975 were fourteen thousand. In 1972 it was eight thousand two hundred.

Q That wasn't the question I asked you. I know from these figures that you had to hook up more in '75 than you did in '72. My question to you, sir, was how many new housing starts were there in your district between 1975 and 1972?

A I am afraid I do not have the new housing starts. These are the new housing finishes, I guess.

Q Well, these are hookups that you've made?

A And completions. New completions.

Q What we don't know from your statistics is how many other houses went onto some kind of heating system other than electric in any of the years for which you've furnished us information, right?

A Yes, we know that because we have all the houses for the electrical hookups.

Q Ah, yes, but that still doesn't tell us how many houses went onto gas, or solar, or wind, or whatever, does it?

A The houses that did not go electric heat went some other way.

Q Right. And we don't know how many that is?

A We don't know which it is, whether it was gas or oil or solar or wind.

Q Right. We don't know how many it is, either, do we, from your statistics?

A Of a cumulative group we do.

Q Well, Mr. Knight, then tell me how many houses went onto gas heat in 1975?

A I told you an accumulated that went other than electric.

Q But we all know that seventy four percent of ten thousand is seventy four hundred, but if we were dealing with numbers like twenty thousand, or forty thousand, or fifty thousand, then the percentages are less relevant to us, aren't they?

A I don't understand.

Q Well, we'll let the record speak for itself on that. The last question that I wanted to put to you Mr. Knight, in connection with the updating that you do of your forecasts, when you look at resources available to meet your loads, do you as a customary matter consider the environmental impacts of those resources?

A Of the resources?

Q Yes, sir.

A Yes.

Q Well, if you do that, Mr. Knight, then can you tell me if new planned hydro generation would provide air pollution problems?

A No, they would not.

Q Would they provide water quality pollution problems?

A They might and they might not.

Q Do you know of any water quality pollution problems caused by any of the hydro generation now under planning? In Washington?

A Not any that are being constructed now. The adders that are going in do not change the characteristics of the streams that they're on.

Q Adders, you mean expansion of existing facilities?

A Yes.

MR. SHENKER: I have nothing further. Thank you, Mr. Knight.

HEARINGS EXAMINER: Mr. Meloy?

MR. MELOY: I have no further questions, Mr. Davis.

HEARINGS EXAMINER: Mr. Graybill?

MR. GRAYBILL: No.

HEARINGS EXAMINER: Very well, before you're excused from the stand, let the record show that Applicants' Exhibits 18, 18-A, B, C, D, E, and 115-B are admitted.

(WITNESS EXCUSED)

MR. BELLINGHAM: I further offer into evidence Applicants' Exhibits as follows: Number 20, 20-A, 20-B, 20-C, 20-D, and 115-D, I believe it is. That is correct, 115-D.

GLENN F. NOGLE, called as a witness by the Applicants, having been first duly sworn upon his oath, both as to his written direct testimony and as to the oral testimony to follow, was examined and testified as follows:

(THE WRITTEN DIRECT TESTIMONY OF MR. GLENN F. NOGLE WAS DIRECTED TO BE INSERTED AT THIS POINT.)

STATEMENT OF TESTIMONY OF GLENN F. NOGLE

My name is Glenn F. Nogle. I reside at North 4616 Elton Road, Spokane, Washington. I am employed by The Washington Water Power Company, Spokane, Washington, and my title is Superintendent, Power Operations.

I was employed by The Washington Water Power Company in 1947 and have been continuously employed by the company in the Power Supply Department since that time. I have had experience in the scheduling section, as a company representative in the Intercompany Pool, in the short-term operations and in long-range resource planning for the company. I was assistant power resource engineer from 1948 to 1953 when I became power resource supervisor. I was resource planning supervisor from 1966 to 1970 when I assumed my present position.

I am a graduate of the University of Idaho with a degree in electrical engineering. In 1966 I attended the Utility Executive Course at the University of Idaho.

My responsibilities include supervision of the company operations in the Intercompany Pool and under the Pacific Northwest Coordination Agreement, power resource planning and studies, power purchase arrangements with other utilities, inter-utility operations and coordination, inter-utility planning, the preparation of load and resource studies for both short-term and long-range planning. I represent the company on various committees and task forces involved with implementing the Pacific Northwest Coordination Agreement and the Intercompany Pool Agreement.

The company is engaged in the generation, transmission and distribution of electric power and energy in eastern Washington, northern Idaho, and western Montana. The company also engages in the distribution of natural gas in eastern Washington and northern Idaho. The company also owns and operates several small water systems in Spokane County; one in and about Clarkston, Washington, and three in Kootenai County, Idaho. It owns and operates a steam heat plant supplying central steam heat service to downtown Spokane, Washington. It derives about 68% of its operating revenues from supplying electric service, 30% from supplying gas service and the remaining 2% from supplying steam heat and water service. The company is the owner of a subsidiary, Spokane Industrial Park, Inc. Approximately 4,000 persons are now employed by approximately 84 businesses located in the park. The company's wholly owned subsidiary, Washington Irrigation & Development Company, is a one-half owner and the operator of a coal field in Lewis County, Washington, which is the site of the fuel source for the Centralia Steam Electric Plant in which the company owns a 15% interest. The Centralia plant, like Colstrip 3 and 4, has two 700,000 kilowatt units. The company's wholly owned subsidiary, Development Associates, Inc., is participating with other northwest gas distributors in a gas exploration project in the Rocky Mountain area and holds leases on lands in

Grays Harbor County, Washington, which may have potential gas or oil reserves or sites available for an underground gas storage site.

Electric service is supplied to more than 190,000 customers in 93 communities in eastern Washington and northern Idaho. The company has a service area of approximately 26,000 square miles with an estimated population of 550,000. The principal community in the area served is Spokane, Washington, with a metropolitan area population estimated at 290,000. The company's historical peak load is 1,076,000 kilowatts. Natural gas service is supplied in Spokane and 32 other communities in eastern Washington and 24 communities in northern Idaho. Approximately 70,000 gas customers are served in these areas.

The company secures its power primarily from hydroelectric resources. It has six plants located in Washington with a combined nameplate rating of 132,400 kilowatts; two located in Idaho with a nameplate rating of 211,250 kilowatts; and one in Montana, the Noxon Rapids plant, with a nameplate rating of 282,880 kilowatts. However, the actual generating capability of these combined plants is approximately 820,000 kilowatts. The company also owns a 32,800 kilowatt capability combustion turbine in Washington and has a 15% interest in the 1,400,000 kilowatt Centralia, Washington, Steam Electric Generating Plant. The company also purchases a percentage of the output of five hydroelectric plants owned by public utility districts located on the mid-Columbia River in central Washington.

These provide approximately 350,000 additional kilowatts of capacity.

Nameplate rating is the kilowatt capacity of a generator which the manufacturer has placed on the unit and stamped on a metal tag attached to the generator. It usually is less than the actual capability of the generator and in the case of the Noxon units is substantially less.

I have referred to kilowatts above and because much of my testimony refers to megawatts, I should state that 1,000 kilowatts is equal to one megawatt. In other words, in order to convert kilowatts to megawatts you divide the number of kilowatts by 1,000.

The company also has other sources of power. It has exchange agreements with the Idaho Power Company. It has agreements with the Bonneville Power Administration and the Washington Public Power Supply System for power out of the Hanford Atomic Works. It has a right to receive some power from the Columbia Storage Power Exchange contract which was negotiated in connection with assisting in the financing of storage dams in Canada. This right has been assigned but will be available after April 1, 1976. It also has an agreement with the San Diego Gas & Electric Company for the exchange of capacity and energy. In addition, the company, together with various other utilities and agencies in the Pacific Northwest, which includes The Montana Power Company and other participants in Colstrip, has entered into a long-term coordination agreement extending until 2003. This agreement provides for the coordinated operation of substantially all the power plants and reservoirs in the area. Water Power is also a party to an Intercompany Pool Agreement with Idaho Power Company, The Montana Power Company, Utah Power & Light Company, Puget Sound Power & Light Company, Portland General Electric Company, and Pacific Power & Light Company. It also has an Interconnection Agreement with Idaho Power Company and Pacific Power & Light Company. Coordinated operations under these various agreements has been responsible for firming up thousands of kilowatts of otherwise secondary power in the northwest region. The company is also a participant in Pacific Northwest Power Company which is seeking a license from the Federal Power Commission to build a hydroelectric project on the Snake River in Idaho.

Applicants' Exhibit No. 20 through Exhibit 20D were prepared under my supervision from data assembled in the normal course of the Company's business.

Exhibit No. 20 shows the estimated energy load and resources of the company in average megawatts for the period 1975-76 through 1985-86. The loads are shown in red and are broken down into two components--System Firm Loads and Contract Sales.

System Firm Loads, indicated by solid red bar, is the electric energy that the company supplies to its retail customers and wholesale for resale customers who are totally dependent on the company for firm power supply. These figures include losses and company use.

Contract Sales, shown by crosshatched portion, includes our firm sales to other utilities. A portion of these sales are assignments of the output of Centralia to or through federal agencies. They also include exchange contracts with San Diego Gas & Electric Company, The Montana Power Company and Idaho Power Company.

The resources shown by the blue bar are broken down into System Hydro, Contract Purchases, System Thermal (excluding Colstrip), and Colstrip, commencing in 1980-81.

System Hydro is the generating capability of the hydroelectric plants owned by the company.

Contract Purchases are contracts for the purchase of power over varying periods of time. The principal item, Contract Hydro, is composed of contracts for the purchase of power from Priest Rapids, Wanapum, Rocky Reach and Wells projects on the mid-Columbia and the Chelan project near Wenatchee, Washington. A contract for purchase of power from the Hanford dual-purpose reactor project and from the Washington Public Power Supply System's WNP #1, the purchase of power from the Columbia Storage Power Exchange and the reflection of our exchange agreements with Idaho Power Company, The Montana Power Company and San Diego Gas & Electric Company are the other significant items.

System Thermal includes our 15% interest in the Centralia steam plant and our ownership of a 32,800 kilowatt combustion turbine located at Othello, Washington. It also includes our percentage share of Washington Public Power Supply System's WNP #3 nuclear plant scheduled for service in 1983 and our percentage share of Skagit nuclear project, the first unit of which is scheduled for service in 1983 and the second unit in 1986. The Colstrip portion of our resources represents the company's planned 15% ownership and is included as a resource in the 1980-81 operation period.

Exhibit No. 20 shows that The Washington Water Power Company has an energy deficiency in the years 1978-79, 1979-80, 1980-81 and 1985-86 with Colstrip included as a resource. Without Colstrip we are deficient in each of the years 1978-79 through 1985-86.

Critical period average as used in Exhibit No. 20 represents the critical period average load and resources for each of the years included in the exhibit. The meaning of critical period average has been defined in various documents affecting the applicants. The definition reads essentially that critical period average shall mean that multi-month period determined for the Coordinated System of the Pacific Northwest Coordination Agreement under adverse streamflows of a historic record adjusted for changes in consumptive uses (irrigation, industrial, municipal supply, etc.) during which the least amount of firm energy load can be served from the firm resources of the parties. For each of the critical load years included in our exhibits the length of the critical period has been determined to be the 42-1/2 month period (August 16 - February 28) based on 1928-29--1931-32 streamflows.

Applicants' Exhibit No. 20A shows the January peak loads and resources, in megawatts, of the company for the same period as Exhibit No. 20. In this exhibit, the loads are broken down into System Firm Loads, Contract Sales and Reserves. Resources are again broken down into System Hydro, Contract Purchases, System Thermal (excluding Colstrip), and Colstrip.

System peak load is the maximum demand of our customers for any one hour during the period being analyzed. Our system peak loads normally occur during the coldest day of the year, usually in December or January. For planning purposes we assume the peak load will occur in January. Our estimates are based on normal, not extreme, weather conditions.

Peak resources are the resources available to the company to meet the estimated system peak load and our contractual commitments with other utilities.

Reserves apply only to peak. These reserves cover potential failure of the company's generating resources as well as providing a margin to cover extreme cold weather conditions.

Exhibit No. 20A shows that Washington Water Power has a peak deficiency in 1978-79 and 1979-80 prior to the operation of Colstrip. It also shows that after including Colstrip as a resource in 1980-81 we are deficient in all years with the exception of 1981-82. If Colstrip is not included as a resource, we show a much larger peak deficiency in all years commencing in 1980-81.

Applicants' Exhibit No. 20B shows the details of the information numerically as illustrated through bar graphs on Exhibits No. 20 and 20A. This exhibit consists of two pages marked page 1 and page 2.

Turning next to the rate of growth in electric operations in 1975 and in the immediately succeeding years, a major factor affecting growth is the impact of conservation of energy and fuels of all kinds. Because of the national and regional energy shortage which we could see developing, The Washington Water Power Company voluntarily terminated all pure sales promotion advertising for electric heat in March, 1972, and similarly discontinued all pure sales promotion advertising in July, 1973. Our communications today are directed toward informing our customers on conservation, efficient use of energy, avoidance of waste of energy, and what the company is doing to meet customer requirements. Another factor which has a depressing effect on electric sales and revenues is the economic slowdown. However, a counteracting and indeterminate factor is the increased demand for electricity due to shortages and costs of other fuels. We are beginning to see signs of this increase now, particularly in home heating. We have tried to weigh the effects of these various new factors.

Our average annual growth rate is estimated at 4.3% over the next ten years. This rate would have been slightly higher, at 4.5%, if Pacific Power & Light Company's Sandpoint load were removed for the entire ten-year period. It has been assumed that Water Power would no longer supply power to Pacific for its Sandpoint load starting in 1982.

Annual load projections are prepared independently by two departments within the company. Marketing Services prepares a five-year estimate of sales. At the same time, Power Supply estimates net system loads by months for 25 years. Before publishing, a reconcilement of the two estimates is made to determine if the two are within tolerable limits and adjustments are made as required.

The procedure used by Marketing involves estimating sales to each of the four general business revenue classifications as defined by the FPC, i.e., residential, commercial, industrial, and public street and highway lighting. Estimates by classification are prepared for each of the four divisions of the company by projecting trends and adjusting these for local economic conditions.

The Power Supply Department procedure estimates large industrial loads and base loads (all net system loads except large industrials) separately and then combines them to give the net system load. The large industrial portion is composed of the largest 15 to 20 customers. The load for each customer is estimated by examining past trends and estimating future deviations from trends. Deviations come from discussions with the customer, Water Power Marketing personnel, and observations of industrial activity in our service area. After combining the individual customer load estimates, an additional increment is added for potential new large industrial customers. Base loads are estimated by projecting past trends which have been adjusted for abnormal temperatures. Adjustments are made to the projections for anticipated departures from the past such as an increase in the rate of new electric heating or air conditioning.

To check the reasonableness of the power supply long-range net system load estimate, a program was developed to combine several categories of loads with each category modeled separately. By varying any one of several inputs (e.g., electric heat saturation, residential customer growth), the effect of changes in that input on the system load can be evaluated. These results are evaluated and compared with the 25-year net system load estimate and adjustments are made as required to arrive at the power supply net system estimate. Load estimates are made annually to reflect any changes that have developed or appeared during the year.

Applicants' Exhibit No. 20C is a graph showing historical load growth and projections of loads to 1985. Loads have been corrected for temperature deviations and temporary shutdowns in industry due primarily to work stoppages. It accurately reflects the historical load growth of the company as well as estimates of future loads made in the normal course of business. Exhibit 20C shows that over the past twenty years our loads have increased at a relatively uniform rate. Projections must be changed when new factors appear. We make every effort to keep as current as possible and to adjust as rapidly as possible when new factors become important for load projections. It demonstrates that loads over a long period of time will continue to go up and, even though load estimates are not and cannot be exact, it is only a matter of relatively short time before the actual loads will catch up with projections.

Applicants' Exhibit No. 20D is a tabulation by months of our load estimates from January of 1976 through December of 1987 and includes both peak and average energy.

It should be noted that Exhibits 20 through 20D, which are labeled "Revised", have been changed from an earlier version which was circulated when this hearing commenced in the spring of 1975. These changes were made to show our most recent estimates of loads and resources. Reductions in load primarily affect need for peak except for a reduction starting in 1982 to reflect the termination of our contract with Pacific Power & Light Company to supply its load at Sandpoint, Idaho. The most significant change which is relevant to this hearing resulted from slippages of large thermal plant schedules, particularly Colstrip Units #3 and #4. Our deficiencies, particularly in the 1979-80 year, are substantially increased.

The question has been asked as to whether or not it is better to overestimate or to underestimate the load growth. We try to estimate as accurately as possible but in my opinion it is certainly preferable to err on the high side. The effect of overestimating is to have a relatively small surplus of power for a short period of time--a few months, a year, perhaps. Usually this power can be sold as secondary. The net long-term effect is very minor and disappears in a relatively short time. If we underestimate, we are not able to carry out our utility responsibility to provide people with the power that they need and demand. The result can be shortages, brownouts, possible blackouts, loss of jobs, cutback in industrial production, all of which tend to have a snowballing effect to produce a depressed economic condition and real hardship in our service area which could last for a long period of time.

As to new electric generating resources planned by the company for the future, we expect to participate in several future power projects to meet our customers' anticipated requirements. In the fall of 1977 we are adding a fifth unit at our Noxon Rapids hydroelectric project. This unit will increase the peaking capability at Noxon by approximately 110,000 kilowatts. The projects we are planning to participate in as joint owners are as follows:

First, the Colstrip No. 3 and 4 units which are the subject of this hearing. We have signed a letter of intent with The Montana Power Company and the other participants under which we would own a 15% interest.

Second, we are planning to own a 5% interest in Washington Public Power Supply System's WNP #3 nuclear plant in Grays Harbor County, Washington, having a capacity of 1,240,000 kilowatts and scheduled for completion in 1983.

Third, we are planning to own a 5.66% interest in a two-unit nuclear plant (1,288,000 kilowatts each) being sponsored by Puget Sound Power & Light Company to be built near Sedro Woolley, Washington, with the first unit scheduled for service in 1983 and the second unit in 1986.

Individual percentages by each utility in the various projects designed to meet the areas needs may change from time to time for a variety of reasons, but the planning for construction will attempt as nearly as possible to meet the area needs and our percentages of the various plants will be designed to meet our individual needs.

We also have a contractual arrangement to purchase a block of power from WNP #1 nuclear plant which is being constructed by Washington Public Power Supply System. Power from this contract will be available in 1980.

The Washington Water Power Company became involved in Colstrip No. 3 and 4 for very good reasons. Our company has a long history of close relations with The Montana Power Company. Since first interconnecting with The Montana Power Company in 1923 at Burke, Idaho, we have exchanged with, purchased from, and sold power to The Montana Power Company over these facilities. Additional ties were made to further strengthen this interconnection capacity in 1965 when a 230,000-volt transmission line was built from our Noxon Rapids hydroelectric project in Sanders County, Montana, to interconnect with Montana at Hot Springs. In addition to our many contractual arrangements we have had over the years with The Montana Power Company, our transmission facilities have enabled Montana Power and other utilities to enter into mutually advantageous arrangements for sales and exchanges of power.

We have for many years been looking for a local fuel supply for the future. We, with other companies and agencies, had investigated a possible coal field in central Washington. We had also looked at coal from Canada as well as coal from eastern Montana and Wyoming. At about this time, The Montana Power Company proposed to expand its Colstrip operations and, after looking at all alternatives, an interest in two 700 megawatt units at Colstrip appeared to be far the best alternative that we had examined.

At this time, Colstrip 3 and 4 is not only the most attractive alternative to our company but in fact it is the only known viable power supply that can be constructed to meet the needs of our customers starting with the 1980-81 period.

For further information concerning The Washington Water Power Company, I refer to the Company's Annual Report to Shareholders for Year 1974 which is filed in this proceeding as Applicant's Exhibit No. 115D. This exhibit was prepared in the usual and ordinary course of the business of the company and is similar to the Annual Reports prepared each year by the company and mailed to its stockholders, regulatory agencies and others having responsibility for or interested in the affairs of the company.

EXAMINATION OF GLENN F. NOGLE

Cross, by Department of Natural Resources and Conservation

By Mr. Shenker:

Q Mr. Nogle, I don't think we're going to have exactly proportional representation here by the percentages that each company is asking for from Colstrip, the number of minutes that they spend on the witness stand, but we'll see if we can't get you out of here more quickly than your predecessors to the witness stand. I do, however, want to ask you a few questions that are really not specifically related to Washington Water Power Company, but to your capacity as the compiler of the west group forecast. You still serve in that capacity, do you not?

A Yes, I do.

Q How many years have you been doing that?

A Approximately four years.

Q Now, we already have in the record, of course, the testimony that compares the 1974 and '75 west group forecast and the 1976 west group forecast will be out soon?

A That is correct.

Q What can you tell me about the general trends that appear from the drafts that you must have already put together as to the differences between '75 and '76?

A The 1976 west group forecast will show a reduction in the total load estimate for the west group area, approximately about three hundred and fifty megawatts the first year of the report, on average, and it will increase to about four hundred and fifty megawatts by the last year of the report.

Q This is on energy?

A This is on energy.

Q The last year of the report would be the year 1986-87?

A The last year of the report would be '86-'87. The only year I could compare would be the last year of last year's report, which would be '85-'86.

Q Right. And on peak? Just an approximation.

A There was a peak load reduction, I'm trying to remember how much, but my recollection is, it was about five to six hundred megawatts the first year of the report, and it was in the neighborhood of nine hundred and fifty megawatts by the '85-'86 year. This is a reduction in total load, the '76 forecast less the '75 forecast. Do you want me to comment, also, on delays in resources, or anything like that?

Q We've had some testimony on that already. The one thing we don't have is what you kind of uniquely represent, and that's the knowledge of the entire west group as to what the total of the forecasts will look like next year. I think we'll probably be here long enough that we'll have the new west group forecast in evidence before we leave. But I kind of wanted to get an advance picture from you. I appreciate that. The only other question I wanted to ask you about the west group forecast is whether there have been any changes in procedures by which the forecast is compiled?

A There have been no substantial changes in procedure. There have been some minor details, minor changes. I think one that most non-engineers would appreciate, and probably the most significant, is going from a July to June basis on the reporting of the average megawatts.

Q I think that's all I wanted to ask you about, but as long as you're bringing up the subject on resources, we've had some exhibits tendered to us that show the stretching out of a number of resources which in the west group forecast were scheduled for earlier years. I assume that's the picture that you're going to portray in the west group forecast, as well, on resources, would that be correct?

A Yes. The west group forecast is going to show a little bit more dismal picture as far as the load resource situation is concerned, because the reductions in loads have been more than offset by the delays in resources.

Q When I had asked you about the changes in procedures, I take your answer to mean, although there is testimony earlier in this, it might make sense to repeat it here, that each contributor to the west group forecast still makes his own decision on how he forecasts and determines resources?

A Right. On his loads especially. Each utility submits their own load estimates, and they're compiled for the total west group. Each system submits its schedule of resources; however, these are compared to a milestone to determine -- a milestone approach to determine a probable energy date for inclusion in the west group forecast.

Q You have a commercial startup date as well as a probable energy date?

A We have a commercial startup date as submitted by the plant sponsor.

Q The actual energy date is based upon your milestone guidelines?

A Correct.

Q For thermal generating stations, those guidelines were set by a committee that consisted of folks from Pacific Power and Light Company and Puget Sound Power and Light Company?

A I'm sure that both Puget and Pacific were represented on the committee, and, I believe, probably Bonneville was also, and probably others.

Q Okay. So much for your functions with the west group forecast. Now I'd like to talk about Washington Water Power Company, which was the purpose of your arrival here in Helena. In describing Washington Water Power Company on the second page of your statement, Mr. Nogle, you show a company that portrays what some folks call vertical integration. Does that term mean anything to you?

A You'd have to explain to me what you mean by vertical integration.

Q You don't just deal in the generation and sale of power. You also have wholly owned subsidiaries, for example, who deal in the production and sale of coal. You operate industrial parks through your company or through other subsidiaries. You operate companies which are consumers of power. Isn't that correct?

A Yes, sir.

Q Now, what portion of the load which you serve is made up of those companies wholly owned by the Washington Water Power Company or a part of the Washington Water Power Company?

A A very, very minor amount. I think --

Q Have you compiled that figure?

A No. I can't think of any. Well, we have the industrial park. All the customers of the industrial park are consumers of Washington Water Power.

Q Well, I really had that in mind, and I'm afraid that I didn't make myself sufficiently clear on that, because the tenants at the industrial park are not wholly owned by the Washington Water Power Company, are they?

A That's correct.

Q But they, of course, are consumers of the power which you would deliver to them?

A Right.

Q If you include the sale of energy to the tenants at the industrial park owned or operated by the Washington Water Power Company, do you now have for me an estimate of what percentage of your load is so serviced?

A No, I don't.

Q When did you get into that industrial park?

A Well, I would guess it would be about between 1955 and '60. I'm hazarding a guess on that.

Q It's perfectly all right if you want to get some help from Mr. O'Kelley on some of those things. I know he's quite knowledgeable, as well as your counsel on that. It's a big one and there are four thousand persons employed there, and it services some eighty four businesses in the park. Can you give me some idea of the extent of acreage involved?

A I've been out there, Mr. Shenker, but I don't think I could give you an estimate of the acreage involved.

Q All right. Then speaking of the Washington Irrigation and

Development Company, that's the owner/operator of the coal field in western Washington, or central Washington?

A Right. It's where the Centralia mine is.

Q That's the source from which the Centralia coal-fired operating station receives its coal, is that right?

A That is correct.

Q Do you have some idea of the reserves of coal in that mine?

A The reserves of coal when the mine was started and when the power plant was started were sufficient to operate the two units over a thirty five year life of the plant, with about the last ten, fifteen years of the life, why we were -- it was estimated that we'd be using lesser amounts of generation from the plant; as newer plants took over the base load operations, Centralia would be operated less hours per year, and so forth.

Q I've had that statement made to me before, I think, by you, that the reserves were sufficient to operate the Centralia plant. I wondered if you acquired any figures as to what the total reserves are?

A No, I do not.

Q Do you know whether any studies have been done by you or your co-owner of the field to determine whether that mine could provide coal for any other user?

A There were some studies done several years ago whether we could support a third unit, if there was sufficient coal to support a third unit in the mine. There was not sufficient coal in the mine to support a third seven hundred megawatt unit at the power plant. There were studies even made of putting another seven hundred megawatt unit at the plant, but importing the coal from out of the state.

Q If the study found out that there wasn't sufficient coal to support a third seven hundred megawatt unit at Centralia, did it find how much coal there was in terms of what kind of a unit it could support? Five hundred megawatts? Three hundred and fifty megawatts?

A I'm not real familiar with these studies. But in general sense, as I understand, and understood at the time they made these studies, the reserves were less than what they had originally anticipated was there. And I understand they are still doing some more drilling and exploration work, Mr. Shenker.

Q And either the Washington Water Power Company or one of its subsidiaries has lease rights to the minerals underground in areas other than where this particular mine is, is that not correct?

A I do not know.

Q You do know that one of the subsidiaries of the Washington Water Power Company is exploring for natural gas?

A Yes.

Q In various places?

A Development Associates, yes.

Q Has any natural gas been found yet?

A As I understand, I believe it's the town of Moffat, Colorado, there was a well found to contain gas. I think up to that time there was something like four dry holes before they had this one producer.

Q One out of five is great in terms of the percentages that other companies have to deal with. Is there a master plan for development over any particular period of time, or in terms of the amount of capital invested in the exploration?

A There may be but I am not familiar with it. That is out of my field, sir.

Q Now, when the Washington Water Power Company lists its resources, do you list those on a nameplate rating, on the net rating, or on the gross capacity rating?

A We do it several ways, Mr. Shenker. For most of your form one, form twelve, Federal Power Commission forms, you have to put them on a nameplate rating so it is used in various places, generally, when we're reporting, like in the west group forecast load resource analyses, we use what we actually expect the plant will produce, an expected capability.

Q On a net or gross basis?

A On a net basis.

Q Similarly in the preparation of the exhibits for this hearing, Mr. Nogle, have you used that same criterion of what you actually expect to be produced on a net basis?

A Yes. You're talking about our hydro plants and our thermal plants?

Q Yes. What you have put on as your material for Exhibit 20 and the letters of 20 after that?

A That's correct.

Q Now you state in your written testimony, Mr. Nogle, that a right to receive some power from the Columbia storage power exchange has been assigned until April 1, 1976.

To whom was it assigned?

A This power was originally assigned to California Utilities. It was recalled from California Utilities and has been assigned to the inter-company pool, three other systems of the inter-company pool, until April, 1976. We have recalled it for our own use.

Q After April 1, '76, it'll be yours?

A That's correct.

Q You have an agreement with San Diego Gas and Electric Company for the exchange of both capacity and energy, or peak and energy, those are interchangeable terms, aren't they?

A No, they're not interchangeable.

Q Peak and capacity are the same for you?

A Peaking and capacity are the same, yes, sir.

Q In your statement you said capacity and energy. We use the work peak more frequently in this hearing, but it means the same thing as capacity, doesn't it?

A Correct.

Q What is the amount of energy and peaking that you exchange with the San Diego Gas and Electric Company?

A We exchange capacity -- we deliver capacity to San Diego in exchange for energy. We deliver an exchange ratio of, for every kilowatt of capacity, we receive twenty five hundred kilowatt hours of peak energy.

Q Can you give that to me in terms of megawattage, as opposed to kilowatt hours?

A Yes. For every megawatt of capacity we deliver to San Diego, we get point two eight five megawatts of average energy in return.

Q What does that amount to in the course of a year?

A Two eight five megawatts times eighty seven sixty hours would be the twenty five hundred megawatt hours.

Q So you run it for the entire year? The exchange agreement covers all hours of the year?

A Right.

Q Now in order to have this agreement with the San Diego Gas and Electric Company, you have to find some way to transmit. I assume you use the Bonneville grid down into California?

A Yes.

Q From there how do you get it to San Diego?

A We deliver it to San Diego at the California-Oregon border. San Diego is to arrange it through the California power pool as delivery through their system.

Q And the San Diego Gas and Electric Company serves the southern California area, does it not?

A Yes.

Q Now, additionally, you state in your written testimony that you have a long-term coordination agreement extending until the year 2003. That agreement is among the utilities and agencies in the Pacific Northwest, including the applicants here for the Colstrip project. How many others are parties to that agreement?

A I think there are seventeen signatures to that agreement.

Q When was it entered into?

A I beg your pardon?

Q When was the agreement entered into?

A The long-term agreement, the one we presently operate on, was entered into -- in 1964 it was executed and became effective in 1965.

Q Has it been amended since then?

A No, it has not.

Q It was, in effect, a forty year agreement?

A It's in effect until the year 2003.

Q Now before entering into that agreement, Mr. Nogle, did you have any cause to check with any state agency in any states, to consult with them about the agreement you were going to enter into?

A To my recollection we did not consult with any state agency.

Q Do you have with you, Mr. Nogle, both the revised addition of your Exhibit 20 and the original Exhibit 20?

A Yes, I do.

Q If you'd get those out, I wanted to look at those with you on a comparative basis.

(WITNESS COMPLIES)

Q The first question I wanted to ask you is of sort of a preliminary nature, Mr. Nogle. On your Exhibit 20-B, revised that's the current edition that's dated December 29, 1975, you list reserves for peak but not for the average energy, as is the case with all other utilities, of course. I wonder if, for the record, you could explain to us why do you have reserves for peak and you don't have reserves for energy?

A There are several reasons. The reasons I give you are Washington Water Power Company reasons, rather than being maybe generally applicable.

Q Fine.

A Forced outage reserves would be one of the primary reasons. When you have a forced outage, for example, in a hydro plant, you generally can get all the energy out of that plant, even though you have a unit out. But you cannot -- you suffer a reserve -- you suffer an outage, or a loss of generation, for the period of time the unit is out, so you could be down over a peak hour, or be down and lose capacity out of the unit, but you would not lose any energy production.

Q I don't quite understand that. Why is it that you don't lose any energy production even though the producing unit is out?

A Well, most of the hydro units, most of the hydro projects, have considerably more capacity in the plant than they have average energy output from the water.

Q So even when the plant is out, in effect, it's not out?

A When the plant is out you lose your ability to shape this energy generation, maybe over the heavy load hours, but you generally have enough units to run the water through the turbines so you do not have to spill it. And, if you get in a position where you may be forced to spill this water, you may hold it in storage in another reservoir upstream until you get the unit back in and can use it usefully.

Q Okay. That's a reason. Are there other reasons that you have reserves on peak and not energy?

A Yes. Your ability -- one of our reasons that we have peak on reserves is our, probably, inability to estimate the peak load due to the severe temperature changes we can get in our system. I would generally feel that we could estimate our energy load in a fair degree of accuracy. We estimate our peak load based on what we call a normal temperature, cold day normal temperature, and this temperature could be fifteen or twenty degrees cooler than this, which would have a tremendous impact on our load.

Q Well, that tells me why you have to have reserves generally. Why do you have to have reserves for cold days, or colder than normal days, for peak and not for energy?

A Your colder than normal days, or your real cold spell, usually lasts, maybe, three or four days, possibly even up to a week. But generally, your deviation in temperature from a month is not so marked, so great that you have a tremendous increase in load. And over a period of months, the temperature seems to average out, generally, anyway.

Q So, in effect, I take it, what you're telling me is that the definition of energy is, the amount of juice that is used on the average?

A Right.

Q Okay. I understand that reason. Do you have others?

A We have a capacity reserve that we use in planning purposes for delays in units. Our reserve includes delays in units. Well, we use it just for planning purposes. It is not an operating type of reserve. It's sort of a catchall type of arrangement.

Q If we can use as an example, Mr. Nogle, the first year that appears on Applicants' Exhibit 20-B, revised, -- that's this current year in which we're now involved, 1979-1976 -- you have reserves of some one hundred and twenty four megawatts of peak?

A That's correct.

Q And I take it that you don't have any concern as to new units that are coming onto stream during the course of the year 1975-1976?

A That is right.

Q But nevertheless, that reserve could also apply to some problem with the delivery of energy from a contract purchase? The reserve is there for that possibility, is it not?

A That is correct.

Q And certainly for your planning purposes and the preparation of this exhibit, you would hope that you never have to use the reserves, isn't that right?

A Yes.

Q And it's been your experience, has it not, Mr. Nogle, over the years, that, in fact, you have not had to dip into your reserves?

A No, I think we've had to in several years that I've -- that I can clearly recollect, that we've had to use our reserves.

Q How many years have you been involved as one of the planners for the load resource analysis for Washington Water Power?

A Oh, I've been in this function better than fifteen years.

Q Surely it's the case that in most of those years, fortunately you haven't had to lose any more hairs by dipping into those reserves very much?

A Well, it's nice to have those reserves there when we need to dip into them, and we have on quite frequent occasions, primarily due to real cold weather.

Q That's why you have them there, because they're nice to dip into; if you don't have them there, you really have to scramble to find somebody else to pick up the slack for you?

A That is correct.

Q Now, if you'll look with me on a comparative basis, Mr. Nogle, to the original set of Exhibit 20, with the letters, that were prepared as exhibits, I believe I'm correct, maybe I just have an incomplete set, but I don't find the same kind of breakdown in the earlier set that you had in Exhibit 20-B, page 1. Did you have that same kind of breakdown before?

A No, we did not.

Q You just had the general categories of loads and resources, without the breakdown under contract purchases, or contract sales?

A That is correct. We went to a further breakdown on this revised exhibit.

Q Why did you do that?

A We thought it would be more convenient for all the parties for looking at our exhibit.

Q Is that a determination you made after checking with the rest of the applicants here?

A The rest of the applicants' exhibits were broken down similar to what our revised sheet is.

Q You decided to kind of fall in step with them?

A That's correct.

Q Okay. Now if we look at the first year that appears on both of the Exhibit 20-B additions, the earlier edition showed a total load for the year 1975-1976 in peak at sixteen hundred and twenty seven, is that correct?

A Yes.

Q Which consisted of your system firm loads, your contract sales, and your reserves. Now the reserves, of course, have stayed the same, but your contract sales and your system firm loads are different between the earlier edition and the later edition?

A That is right.

Q Now it's not a huge difference. The system firm load, 1975-1976, was some thirty odd megawatts more -- I should say,is some thirty megawatts more in the current edition than it was in the last edition. Why is that?

A We reduced our load estimate, Mr. Shenker, since this first exhibit was put out. We are currently using our latest estimate. This is the one that has also been included in the west group forecast.

Q And on contract sales, the early edition showed, for the year 1975-1976, two hundred and fifty eight megawatts of peak. It now shows something more than that: two hundred and seventy eight megawatts of peak. Why is that, sir?

A This was the difference in tested capability we assumed at the Centralia project. The tested capability of the Centralia project influences two of our sales arrangements we have up there: the BPA so-called Centralia sales, and the central valley project. On our original exhibit we used a twelve sixty seven tested capability for the '75-'76 year and fourteen hundred megawatts thereafter. I think we were consistent with the participants and when we revised it we used the fourteen hundred tested capability in all years, which increased our assignment to BPA and CVP.

Q I take it the nature of your contract sales in those two categories, in any event, is such that if you have more available, you have to sell more, is that what you're telling me?

A Yes. It changes between the parties. I guess the total for the parties didn't change very much. This twenty megawatt increase in contract sales would be the increase in twenty megawatts to the Montana Power Company.

Q Oh, Montana Power Company is listed as fifty one megawatts now, it must have been thirty one megawatts before --

A It was thirty megawatts before.

Q I see. Why did you decide to sell them another twenty megawatts in between the preparation of these two exhibits?

A It actually is an exchange arrangement we made with Montana Power Company this last year and it extends for several years, I think through, probably, '79-'80, isn't it? Through June, 1980.

Q Okay. Now, Mr. Nogle, on the resource side, your 1975-76 current revised edition of Exhibit 20-B shows sixteen hundred and seventy seven megawatts of peak, but your old edition showed sixteen hundred and fifty four megawatts of peak. In other words, you have another twenty three megawatts of peak on the resource side. Where does that come in?

A Twenty of it is coming from the Centralia project, increased and tested capability of the Centralia project.

Q That's most of it right there. So, you're telling us that in the period of the months that have gone by between the preparation of the two sets of exhibits, you found out you were going to have a little more power provided for you from the Centralia project, is that right?

A We assumed that we would have more. This exhibit is really a year that was half through. It was when we made the revised year, so we used, as I say, in Centralia, we had previously used a twelve sixty seven tested capability, which still is what the tested capability of that project is, but we did go in conformity with what the other applicants had shown, as using fourteen hundred megawatts at Centralia.

Q Yet in the same year, 1975-1976, the amount of your additional energy that is available is greater than the amount of your additional peak that is available when you compare the two sets of exhibits. Can you tell me why that is, Mr. Nogle?

A Yes, I think I can.

Q Please do, sir.

A There are several reasons for it. The increase in the tested capability from twelve sixty seven to fourteen hundred in the Centralia project did give us an increase of about, net, of seventeen megawatts of generation in our system. That is an increase in resources, as I look at these two exhibits, that's close to the change.

Q Okay. As a general statement, Mr. Nogle, would you agree with me that the revision in Exhibit 20-B of December 29, 1975, shows that your surplus situation prevails more than it did in the earlier set of exhibits?

A Yes, the exhibit reflects a greater surplus situation.

Q And that's for two reasons, I suppose. One is that you decreased your load forecast; the other is that there are more resources that are available in some of those years?

A As I pointed out, Mr. Shenker, the 1975-76 year was sort of a, maybe a weird year, because we were halfway through the year and we went with firm contractual capabilities that we had before the year. As the year actually turned out, and we operated during the year, we entered into several more arrangements or short term agreements that we have not shown here, which reduced our surplus, which disposed of additional blocks of power to other utilities.

Q Sure. You didn't need it so you sold it to somebody who wanted it?

A That's correct.

Q Let's move to the year 1980-1981, which is the first year involved in the Colstrip 3 and 4 project. Let's look at loads first. The load forecast on your original set of exhibits is about thirty megawatts a peak more than is true on the current revised, but the energy forecasted on your original set of exhibits turns out now to be two megawatts less than was previously projected. Can you tell me why?

A Yes. We reduced our peak load estimate more than we did our energy estimate.

Q Why?

A We felt our peak load estimate was just a little bit too high.

Q I assume that's based upon the more current experience that you had over the time period between the two sets of exhibits that were prepared?

A I think this is primarily based on the experience that we had after we prepared -- last winter after we prepared the estimate used in the '74 exhibit, or the first exhibit, and when we made our estimate this year for this later exhibit that we used in the last west group forecast. I'm not so sure that from actual experience that we've had in December and so far in January that we were wise in reducing our peak estimate.

Q Who is WLB at the Washington Water Power Company?

A That's Les Bryan.

Q Do you know why he would have projected fourteen hundred and forty eight megawatts as your total firm load instead of the nineteen hundred and nineteen that appeared on your first set of exhibits or the eighteen hundred and eighty eight that appears on the current revised edition?

A You have me confused as to what figures you're referring to.

Q Fourteen hundred and forty eight megawatts of peak for the year 1980-81?

A Fourteen forty -- in place of the fifteen forty seven?

Q No. You now have nineteen nineteen on the first set of exhibits and eighteen eighty eight on the second set of exhibits.

A For the year 1980-81?

Q Yes, sir. Fourteen forty eight is substantially less than anything that appears on those first two sets of exhibits.

Isn't it?

A You say in the year 1980-81 -- you were looking at total load, or were you looking at system firm loads?

Q No. System firm loads of thirteen hundred and sixty nine megawatts. I'm looking at the sheet that you provided for us, Mr. Nogle, dated February 10th, 1972, by this WLB fellow from the Washington Water Power Company.

A Yes, sir.

Q In the year 1980-81, the total firm load was fourteen hundred and forty eight megawatts.

A All right. Including our contracts and our exports, yes.

Q And we're including the same things that you included in the Exhibit 20-B.

A All right.

Q Can you tell me why in that three year period between 1972 and 1975, your projection for the year 1980 should have increased by about twenty five percent?

A Two reasons for this. I'm comparing these two tabulations, Mr. Shenker. We have raised our system load estimates considerably since 1972, especially on peak. The difference in system load estimates, system firm load thirteen sixty nine to fifteen forty seven, which is approximately one hundred and eighty megawatts, is an increase in our anticipated system peak resources -- peak load.

Q Yes, I can see those figures. I'm wondering why you anticipated such a big jump between these years of projection?

A Our earlier projections that we made for our system have proven too low from 1968 on; we've been underrunning our estimates. Our loads have been overrunning our estimate. Our estimates have been too low. We have increased our estimate. Our estimates on peak have especially increased rapidly since about the 1971 year due to the tremendous conversions and installations of new electrical customers in our system.

Q You do recognize this sheet as something that came from you, from the Washington Water Power Company?

A Yes.

Q It was something that was prepared in the ordinary course of business in your company?

A Yes.

MR. SHENKER: I've marked that DNR Exhibit 15, Mr. Davis, and I'll now offer it.

MR. BELLINGHAM: I have no objection.

HEARINGS EXAMINER: DNR Exhibit 15 will be admitted.

Q Now, in that first year, 1980-81, looking at the two sets of exhibits, Mr. Nogle, 20-B, in the old set of exhibits, you had a surplus of twenty eight megawatts peak and thirty megawatts average for the year 1980-81?

A Yes, sir.

Q You now show a deficiency for those years?

A Yes, I show a deficiency of forty three megawatts on peak and forty five megawatts average.

Q The loads, we know, went down instead of up, so in order to have a deficiency now where previously there must have been a surplus, I suppose we could guess that the resources had to be diminished?

A That is correct.

Q And the diminution in the resources comes from Colstrip, or from other sources?

A It's primarily from Colstrip. A hundred and five peak and seventy seven average megawatts are delay in Colstrip. There is an increase in thirteen megawatts by a contract that we did not have previously. There is a decrease in ten megawatts of another contract which, essentially, net out. The primary change is in Colstrip.

Q What are you going to do about that?

A I guess there isn't anything I can do about putting Colstrip back a year earlier, which I'd sure like to.

Q That doesn't seem to be one of the available options. What are you going to do without that option?

A In meeting our requirements in the 1980-81 year you're asking me?

Q Yes, sir.

A It's applicable to '79-'80 and '78-'79. We're concerned about all of those years; we have the same problem. We have been in contact with several of our neighboring utilities to the south of us, to Arizona Public Service, Public Service of New Mexico, with Utah and through Utah with Salt River. There does not seem to be any available firm power supply in any great quantity other than probably combustion turbines. So, we will probably go ahead with installation of some combustion turbines in our system. We are now in the process of trying to get a siting certification so we can get a site to put in these combustion turbines for this emergency purpose and have these as emergency backup to operate for energy purposes if we have to and pray that we get very good water conditions and we don't have to operate them. And also that we can get an oil supply to operate them if we have to.

Q I notice that you do not use in your resource projections the term, median water adder, that the Montana Power Company uses?

A No, sir, I do not.

Q Do you know what that term means?

A I heard it defined yesterday.

Q Okay. Well, you just told me about hoping for better water conditions. You're really talking about a median water adder, aren't you?

A Yes, I'd really be hoping for median water adder, but I sure wouldn't plan full resources to meet our customers' requirements in median water. We definitely feel that as a company we have responsibility to supply our customers' firm requirements. And this is only put into operation to supply them under adverse conditions. If we relied on supplying our customers under a median water, we'd be gambling with the ability to supply their power supply. We'd be playing Russian roulette with our customers' ability to carry their load.

HEARINGS EXAMINER: Let's have a brief recess now.

(RECESS AT 3:05 P.M.)

The hearing was reconvened following a brief recess, at 3:25 P.M.

HEARING EXAMINER: We can proceed.

CONTINUATION OF EXAMINATION OF GLENN F. NOGLE

Cross, by Department of Natural Resources and Conservation

By Mr. Shenker (continuing):

Q We were talking before the afternoon recess, Mr. Nogle, about the year 1980-81, and you told me of your concern about the years 1980-81 because on your current revised edition, the peak and average both show a deficiency instead of a surplus. In the earlier edition you had had a little bit of a surplus, 28 and 30 megawatts, respectively, between peak and average, but now there is a deficiency, you have to meet that. Why, Mr. Nogle, haven't you talked to your good friends here at the Montana Power Company about solving your peaking problem, because they have a surplus in 1980-81? Did you know that?

A Mr. Shenker, in 1980-81, I do not anticipate the peak will be that great a problem in our system, because I anticipate that we are going to have to put in combustion turbines in the year 1979-80 to meet our energy needs, which is our primary concern, our energy needs, and we'll have to put in combustion turbines and attempt to get an oil supply. We absolutely have to in order to operate these combustion turbines to meet our energy requirements to carry our customer needs. In the year 1979-80, we feel that there is peak available for sale and maybe Montana would be somebody we'd approach to purchase capacity from if they had some. In '79-'80, we will need some capacity. As I say, the area, we feel there is capacity available and it can be purchased. In the '80-'81 year, we feel that the installation of the combustion turbines will cover our peaking requirements.

Q Why would you want to install combustion turbines? I mean, that seems like an extra expense that you shouldn't have to go to when your friends over here at the Portland General Electric Company have some ready, willing and able combustion turbines which, if operated, in 1980-81, would produce a surplus of 105 megawatts for energy. That would solve your energy problem nicely for 1980-81, wouldn't it?

A Would they also have a surplus in '79-'80, would be, I think, our real question.

Q The year 1979-80 is your problem, not'80-'81?

A That is more of a problem, the '79-'80 year, yes.

Q Well, of course 1979-80 is not one of the Colstrip options that we're talking about now, but if that's your concern, 1979-80, you could come again to your friends at the Montana Power Company and explain to them your problem and they could tell you about the additional capacity that they have available without building any new plant, to give them a surplus that year.

A Mr. Shenker, our real concern is not capacity, it is energy.

Q All right, energy, because on energy in 1979-80, the Montana Power Company would have 22 megawatts of surplus if they were to run a plant that was available for that purpose. They don't have to build anything, they just have to use it.

A I am sure that if Montana has some surplus available, that we'll be talking to them.

Q That's how you solved that problem, then?

A This would be one of the ways. As I mentioned, we have talked to several other utilities outside the area.

Q Yes, that was in Arizona, in New Mexico, and in Utah?

A Yes.

Q I suppose from time to time you talk with sister utilities in Colorado, as well?

A We do keep in touch a little bit with utilities in Colorado through WSCC to Utah. I wasn't aware of the Colorado Public Service, if that's to whom you are referring, having any surplus energy in their system; in fact, until Fort St. Brain gets on the line, I thought they were in a rather deficient position.

Q Well, I suppose the more the talk, the more you can find out from those folks. We're talking about a rather wide geographic area in which you now sweep to look for coordination of the energy use or peaking use. You've talked about an interconnection all the way down to the southern tip of California. Now you tell us of contacts that you've made in Arizona and New Mexico and Utah. We know, of course, your contact in Montana. You have some contacts in Idaho, you told us of those, Oregon, and Washington. Is it your intention, Mr. Nogle, that the Board of Natural Resources and Conservation should be able to make a judgment on the availability of resources to meet loads in all of those states?

A I'm not saying anything of the kind. You asked me, I believe, how we planned to meet our requirements and I suggested that it looks to me that we will be putting in combustion turbines in the '79-80 year as our most viable alternative.

Q Unless you buy it from somebody else?

A If we buy it from somebody else, there are two problems; one is transmissiong, getting into our system and the second, if we buy combustion turbine generation from another system, from, say, Arizona, for example, and they have an outage in their system, we're the ones that are liable to be cut off, and if we're going to have to pay that kind of price for our energy, then we will need combustion turbines for peaking capacity in later years, and I think we ought to be getting in combustion turbines in the '79-'80 year.

Q It sort of sounds like the territorial imperative, doesn't it? You've got to be able to take care of yourself first.

A Not necessarily. I think we ought to do it in the most economic manner, and based on some of the figures that we have been able to get from the other companies, the availability and the price, it appears to us that it would be most economical for us to put it in our service area right now.

Q You wouldn't have any transmission line necessities to be met if you were to go into further cooperative relations in purchasing or selling with PGE or the Puget Sound Power and Light Company or the Pacific Power and Light Company, would you? You're pretty well connected with them now, aren't you?

A Yes, we are interconnected to mid-Columbia point of delivery with all of those systems. There still could be some transmission limitations or some wheeling problems that we'd have to solve if we had arrangements with them, but we have had dealings with all those companies you mentioned.

Q As we move on, in the year 1981-82, your old edition of Exhibit 20-B showed a deficiency in peak that's been wiped out in the current exhibit. The 1982-83 year, however, still shows a peak deficiency, even with Colstrip 3 and 4. It's down a little bit from the deficiency that you had projected previously, but it's still there. How are you going to meet that one?

A Again, I think that by 1982-83, 1983-84, and 1984-85, we need additional capacity in our system.

Q Peaking?

A Peaking capacity, this, again, relates to the combustion turbines that I said that I felt that one of our viable alternatives was to install some combustion turbines in the 1979-80 year, because we would need these in a very few years for capacity purposes, anyway, for reserve purposes.

Q Well, the peaking capacity of a combustion turbine -- I suppose it's pretty well accepted in the utility industry -- is excellent low capital investment, very good maintenance? The problem, as I understand it, with the combustion turbines, is getting the fuel for them. Doesn't that disturb you as a viable option therefore?

A Yes, it does disturb me, and this is one of the things that we're concerned about, that we have a real concern about, is getting fuel for combustion turbines for the '79-'80 year and the '70-'81 year.

Q We're looking, also, at the years '83-'84, '84-'85, and '85-'86, and all those years, with Colstrip 3 and 4 operating full-blast, with whatever they can provide you for your peaking, you have 210 megawatts on your Exhibit 20-B for the year 1984 and the year 1985 with Colstrip 3 and 4 on peak, and yet you have as much as 220 megawatts of deficiency in 1985. Now, if you're going to make that up with combustion turbines, what's your concern on fuel?

A I don't believe we would be making up the entire sum of the 220 megawatts, and I don't feel that we're looking at 220 megawatts combustion turbines. I think we're probably looking at, at least initially, from our preliminary site investigation of certifying the site, for between 75 and 100 megawatts, in that range. In '85-'86, and in the future years after that, I think we're probably looking at installing our plant in our own service area, of some type, to meet our load requirements.

Q Okay, let's talk about that. As I understand it, the Washington Water Power Company has had, for some years, on the thinking board, if not the drawing board, the plan of putting in a coal-fired generating station in the Spokane area, is that right?

A In that vicinity, yes.

Q And that's "our plant" that you were talking about a moment ago?

A Yes, water power would be the sponsor of a plant is what I meant, Mr. Shenker.

Q Have you made any more definitive the thoughts that you had for how large that plant would be and when it would come in from the time that you and I last talked, last March? At that time, as I recall it, without checking my notes, you weren't sure whether you would build your own 150 megawatt plant all by yourself or you'd go to a 300 megawatt plant with somebody else or a 500 megawatt plant with several other people. There were a number of options you were still thinking about, do you remember that?

A Yes, I do.

Q Are you more definitive in your thinking now?

A Not very much. We're still looking at all the range that you're talking about. I believe we would invite participation in a plant, to be some kind of a joint effort plant. Until we have some consulting work done, I don't believe that I could be any more definitive on the size of the units and the number of the units.

Q You're still thinking in terms of a coal-fired power plant, though, and still in the Spokane area?

A Yes, sir.

Q Where would you get the coal?

A It would probably be from the Montana or Wyoming area, possibly Canada, although that doesn't look too good right now.

Q You've looked into those prospects in the past, haven't you, from the water power company, on coal delivery to a generating station near the Spokane area?

A Yes, we have.

Q And you bear in mind the economics of doing that, as opposed to obtaining power from some mine-mouth generating station and transmitting it to your system?

A Yes.

Q Now, if you look with me, Mr. Nogle, at your Exhibit No. 20-C, that's the squiggley-line exhibit on graph paper?

A This is the revised exhibit?

Q Yes, sir. When you compare that with the original Exhibit 20-C, just by my naked eye, it's a little difficult to see too much change between the two except for the fact that you have typewriting where you had handwriting in the past. Has the squiggley line changed?

A We may have added a couple of months of actual loads. I'm sure it's the same original curve up to probably into '74. The projection is probably a little bit different than it was in the earlier exhibit, just a slight amount lower, I believe.

Q In 1986, of the original exhibit, it looks to me like it ended up -- 1986 is actually the year off the exhibit -- it's the last line on the original exhibit. It looked to me like it ended up right square at 1100 megawatts for average energy. Would you agree with me on that reading?

A Yes, sir.

Q And now it looks like it ends up closer to 1050 megawatts, I suppose, than 1100?

A I think that's correct.

Q I suppose the reason for the diminution in the projection of your load is, with a little bit more in the way of current experience, you decided that the entire projection should be dropped?

A This is an energy estimate. Primarily, the reduction in this estimate is due to Pacific Power and Light taking over the service of their load in Sandpoint territory, Sandpoint, Idaho, starting January 1, 1982, and is reflected in our latest load estimate, Revised Exhibit 20-C. The earlier Exhibit 20-C had us serving this load as part of our system load.

Q If, two years from now, Mr. Nogle, somebody else took over some other area for you, then that adjustment would have to be made at that time? That's just the ordinary course of business in projecting loads and forecasts, isn't it?

A That's right. I have no other such position like the Pacific, where we have been serving their load.

Q When did you first get the idea that Pacific would take over the Sandpoint facility?

A It's something that has been under discussion for some time. The contract expires in December 1981, and it looked like the company and Pacific were -- got together on any kind of a extension of the contract, and I think this is a mutual arrangement, where Pacific is going to provide their own power supply to serve their load, starting in January, 1982.

Q You didn't know that, evidently, last May?

A No, I did not.

Q But you knew it as of December, when the revised edition was tendered?

A When we made our new load estimate.

Q By the way, Mr. Nogle, I asked Mr. Knight just a little bit ago, in the course of revision of estimates in load forecasts and resources, you have been keeping Dr. Shah of the Commonwealth Associates, advised of your changes? Have you been doing that?

A No, I wasn't aware that we were required to or asked to.

Q I don't know that you were required to or asked to. I just wondered whether you were doing that? As far as you know, you have not?

A No, we haven't. We have not been keeping Dr. Shah advised.

Q You shook your head.

A That doesn't show in the recording.

Q Right. What has been your average energy growth rate between the years 1973 and 1975?

A We had a growth rate of about 4% in those two years.

Q You had the Spokane World's Fair during those two years, didn't you?

A We had the Spokane World's Fair in the latter part of '73 under construction. It was in operation in '74.

Q Did the Washington Water Power Company get called on to service that area?

A Excuse me, I think I made a mistake in my figures, but I'm going to check this just a minute. What was your question, Mr. Shenker?

Q Why don't you ask Lloyd Meyers to check it for you?

(PAUSE TO COMPLY.)

A 3.6% per year.

Q Does the Washington Water Power Company provide any power for the Kaiser Meat installation?

A No, sir.

Q That's directly from BPA?

A Right.

Q How about the magnesium plant in the Spokane area, do you service that?

A The one at Addy?

Q Yes.

A This is a load that's just recently been --

Q Yes, sir.

A We serve the wheel-turning portion of that load only.

Q How much is that?

A In the neighborhood of four to five megawatts now, and I think it will ultimately get up to about six megawatts, or something like that.

Q While Mr. Knight was testifying earlier today, I think it was Mr. Graybill who was chatting with him about the Montana Power Company's petition for a rate increase. He read off some of the proposals the Montana Power Company made, which said, in effect, the greater the amount of energy consumed, the lower the price per kilowatt. Now, that was also the subject of a discussion that I had with Mr. Knight as to his company's involvement in a rate proceeding in Washington, where the appropriate commission in Washington spoke its mind on the desirability of providing disincentives for the consumption of energy. Where does your company stand in terms of rates? Do you provide the lower rate for the greater amount of energy consumed?

A Our commercial rate -- residential rate, excuse me -- is an initial charge and then a uniform rate for all kilowatt hour consumption.

Q And commercial?

A Offhand, I couldn't tell you.

Q How about industrial?

A Again, I couldn't tell you.

Q The new plant at Addy -- that is a magnesium plant, isn't it?

A Yes.

Q What rate do you charge them as compared to the rate that you charge an ordinary residential consumer?

A It would come under our large general service classification, or extra-large general service.

Q Which is a lower rate, right?

A It would depend upon the particular characteristics of the load that we serve. I suspect that it would end up to be a slightly lower rate.

Q Slightly lower?

A Yes. A lot would depend on the demand versus the kilowatt hour consumption of the particular customer.

Q Do you have a company policy, Mr. Nogle, in favor of providing disincentives for the greater consumption of energy?

A No, sir.

Q In your statement on page 13, sir, for the written testimony in this proceeding, you refer to what is sometimes called the "parade of horribles." If you don't have the resources to meet the load, shortages, brownouts, blackouts, losses of jobs, cutback in production, general unhappiness -- I guess you didn't say general unhappiness -- but that's part of the parade -- have you had those problems in your system in the last three or four years?

A No, we have not. I'm sorry, sir, I didn't get the page.

Q 13.

A No, sir, we have not been in that position the last several years.

Q On the next page of your statement, sir, you refer to the individual percentages that each utility may have in the various projects, and tell us that those percentages may change from time to time for a variety of reasons. What is some of the variety of those reasons?

A Several reasons, Mr. Shenker. The first one would be the one that was mentioned this morning by Mr. Knight, Puget Sound Power and Light, where we had a 5% interest in Skagit and a utility having a 10% interest or an option to take a 10% interest, declined to take the option, and the rest of the utilities increased their percentage a small amount; also, I think you could have varying percentages in the plants, because you're going to put these plants in to meet the needs of an area as well as an individual utility and you would install a plant, and then a percentage of the plant, if this was surplus to your needs, you would try to lay this off for a short term sale to another utility in possibly a year or two. We have done this in many instances.

Q Any other reasons you can think of?

A I don't know if it's clear, the way this paragraph reads, but probably every plant that you have joint participation in, there would be different percentages by each utility.

Q Oh, I'm sure that's the case. What I understand from your listing of some of the reasons that may go into the variety that you mention in your written statement is that somebody thought that he needed a given percentage when he first decided to enter into the project and changed his mind, and finds that he doesn't need that particular percentage as some years go by, and that would be the same as if the power was already on hand and the participant in a particular project said, "Look, it's surplus for me now. I'll sell it to you," isn't that right?

A It could be arranged, possibly.

Q Let me ask you, Mr. Nogle, it is true, is it not, in varying stages of the development of the Colstrip project, the Washington Water Power Company had contemplated taking some percentage other than the 15% which you now project, isn't that true?

A Yes, I believe we initially had a 10% figure in mind.

Q So when you first started in on the project, your intention was to pick up 10%, but just as you've described to us that the percentages can vary, you moved yours up to 15%?

A Yes, sir.

Q Of course, at that time, there were only four participants, and the way the percentages ran, it was 50% for Puget, 25% for Montana, 15% for Portland and 10% for you, right?

A Right.

Q All those percentages have changed as of the present time, have they not?

A Yes.

Q And I take it that your testimony, consistent with the statement that you made in the written text, is that folks had different perceptions later as to what they thought they needed and how they wanted to put it on line, and that's why it was reshuffled, right?

A Right.

Q When I had the opportunity to talk with you on deposition last year, Mr. Nogle, you then had known for well over a year, which would put it back to early 1974, that the original schedules for the Colstrip units would be very difficult to attain?

A This was the first year 1978, and the second year, 1979?

Q Yes.

A Yes, I think at that time we were a little apprehensive that there would be some difficulty in meeting those schedules.

Q You knew that you couldn't meet the schedules by then, didn't you?

A No, I don't believe so. We were apprehensive about meeting these schedules. That was a concern to some of us in the planning; still, I think they were hopeful that they could get a decision to go ahead with the project, an expeditious decision, and proceed with construction, and meet the schedule.

Q When you and I talked a year ago, sir, at that time you did not know how long it would take to get delivery of a turbine for a coal-fired generating station if you had placed the order that very day. Do you know now?

A I can make a guess, but no, I do not know. I think every individual turbine or boiler would be something that you'd have to sit down with the manufacturer and find out when you could get a delivery date.

Q In the course of examining the need for coal which would power a coal-fired generating station in the Spokane area, you had had contact with representatives of Burlington Northern, had you not?

A There are people in our organization who have, sir.

Q And one of the people at Burlington Northern with whom you had had that contact was a Mr. George Powe, P-o-w-e, isn't that correct?

A That's correct.

Q You considered him a fairly authoritative spokesman for Burlington Northern?

A I would think he is. I've never met the gentleman.

Q The information that he delivered, you considered to be reliable?

A I would.

Q One of the thoughts that you had in looking at a coal-fired generating station in the Spokane area was that you might put a single unit of about 300 megawatts on and then a second unit in about the same amount in the following year. Is that still a thought process, or have you become more definitive about that?

A It's still a thought process, you might say. It's at least one of the ideas that we might have under consideration, is putting units in, a first unit, followed by a second unit maybe two years later instead of just following a year later. As I said before, the size of the units and the participation in the units would depend upon the participation we had in the plants. We feel it would be more than one utility.

Q Well, sure, you couldn't, by yourselves, put on a 300-megawatt unit and another 300-megawatt unit?

A No, sir, we could not, with that kind of consumption, right.

Q You told me a few minutes ago, with the assistance of Mr. Meyers, that for the last few years your growth rate was 3.6% on energy. The average annual rate of growth that you had projected for the 10-year period, 1975 to 1985, was about 4.9%. That's as of last year, when you testified on deposition. Is that the same figure that you would now project or has that one been shifted downward, too?

A Excuse me, Mr. Shenker, this 4.9% sounds a little bit high for the water power system. You aren't referring to the West Group Forecast Area in my deposition, are you? I think you asked me about that.

Q You're absolutely right, sir. I am now referring to the West Group Forecast, and should not have been. I appreciate your correcting me on that. The West Group Forecast was at 4.9% in its 10-year forecast?

A That's correct.

Q The water power company was below that figure?

A That is right.

Q Do you remember what that figure was?

A Last year's? The one we now make in our revised exhibit?

Q Yes, sir.

A I believe -- excuse me a moment -- (pause) -- our growth rate, as stated on page 9, in the next ten years, is approximately 4.3% and if it hadn't been for that adjustment for the sampling, the load would have been about an overall rate of 4.5% compounded annually.

Q 4.5% is the figure that you were using last year. You've adjusted it downward?

A This is right. The 4.5%, excuse me, is probably using last year, but the adjustment down is just a reduction of this Sand Point load.

Q In looking at a 4.3% growth rate for the Washington Water Power Company, Mr. Nogle, have you taken into consideration any effects of conservation of energy?

A Yes, we have.

Q And do you do that by a factor in a formula or by judgment?

A We have done a combination of both. We have forecasted loads without the effect of conservation and then determined what we felt the conservation was and then adjusted our estimates by that amount.

Q I take it that that's a downward effect upon your growth rate?

A A downward effect.

Q Are you satisfied that that's a perfectly valid instrument or tool to use for your computerized or mechanical forecasting?

A Are you talking about our method of estimating the conservation that we had?

Q Yes, sir.

A Yes, we had several people in our company, not only our department, but other departments, and we all got together and tried to make the best estimate that we could of the effect that conservation has had on our system.

Q You're sufficiently satisfied that the collective best interests of those who worked in your company has now produced a formula factor that you should use, whether by computer or by mechanical analysis?

A That is right.

Q Do you use a computer, or is it a mechanical analysis?

A We use both.

Q When last we talked, also, Mr.Nogle, at that time the Washington Water Power Company had not considered the construction or operation of any coal-fired gasification plants at any time during the next 20 years. Have you done any further exploring of that possibility?

A I would say to the extent that we are doing some research in coal, doing some exploration in coal, and some of this coal is of the lignite type that could be suitable for coal gasification, we are considering this possibility.

MR. SHENKER: Okay, sir, I have no further questions of you at this time and I have no objection to any of the exhibits, Series 20, offered by this witness, nor to the annual statement of Washington Water Power Company.

HEARING EXAMINER: Thank you, Mr. Shenker. Mr. Meloy.

Cross, by Northern Cheyenne Tribe, Inc.

By Mr. Meloy:

Q Mr. Nogle, you have been involved in load forecasting for a while, have you not?

A Yes, sir, I have.

Q Can you tell me how far in advance you can trust one of your forecasts in terms of how much your need is going to be or how much your peak will be or how much your deficiency will be, how far in advance that forecast is reliable?

A You're asking me for a confidence factor of some sort, Mr. Meloy?

Q Yes.

A For several years, our forecast made ten years in advance would have been very good. The forecasts we made in 1970 for 1975 would have been low. Our loads have exceeded that. I guess it depends a little bit on what happens in the interim period of time between when you make your forecast and the point of time you're looking at. For a long period of time, our forecasts have generally been fairly good. We have a pretty good degree of confidence in our forecast.

Q And that's, you say, ten years and five years, other times, and not even five years sometimes?

A Sometimes five years have not proven too good, but generally, I'd say, overall, our forecasts have proved to be fairly reliable and fairly accurate.

Q When did you forecast the deficiencies -- when was the earliest date that you forecasted deficiencies in '78-'79 and '79-'80 and up to '85? When was the earliest that you prediced that you would have deficiencies?

A I couldn't answer that, Mr. Meloy. We make estimates and forecasts sometimes almost monthly and under various conditions, various assumptions. To put a definitive year when I first made a forecast of deficiencies in '78-'79, I'd have to ask you what sort of assumptions?

Q Well, you are in 1975 predicting a deficiency, a peak deficiency in -- referring to page 7, I think, of your statement, Exhibit No. 20 shows that Washington Water Power Company has an energy deficiency from '78 through '86 even with Colstrip included as a resource.

A Yes. I would say that probably the first time we forecasted a deficiency in '78-'79, Mr. Meloy, was the first time we heard that Colstrip had been delayed from 1978 to 1979.

Q When was that?

A I guess it would have to have been some time after last summer some time, probably.

Q That's only two years.

A It would have been the spring of '74.

Q Three years. On page 8 you say that you have -- Exhibit 20-A shows that Washington Water Power has a peak deficiency in '78-'79 and '79-'80, prior to the operation of Colstrip. When did you make that prediction?

A I think that we made that deduction this fall when it was determined that Colstrip would be delayed until 1980-81. Maybe I confused you, Mr. Meloy, or didn't answer your question correctly, but I think the first year -- what I mean to say is, the first year that we would have forecasted a deficit for the '78-'79 year was at the time when we found out that Colstrip would not be available in July 1978, that it had been delayed a year, and I can't give you that date right now.

Q Let me make it a little easier for you. When you entered into the agreement to participate in Colstrip, when was that?

A I believe the letter of intent was in 1972. I will check that. (Pause). Yes, at least I have a letter of intent in September of 1972.

Q Then I assume at that time you must have predicted that you would need power from Colstrip after that date, isn't that right?

A I think in 1972, we were probably predicting that Colstrip would be in in 1978, July 1978, for the first unit and that we would have a use for the power at that time.

Q You would have need for the power at that time?

A Yes, we'd have a use for it.

Q Then you did know in 1972 that you would need power in '79?

A '78-'79.

Q You did know that?

A Yes, I probably did, either that, or we were buying Colstrip power --

Q Can you tell me in 1972 how much power you thought you would need in 1979-80?

A I can maybe make a guess.

Q I'll accept a guess.

A It looks to me, Mr. Meloy, that we anticipated we'd probably need some additional generation in any sizeable quantity about 1979-80, that Colstrip would probably have come in 1978-1979 and at that time would probably have been surplus to our needs, or we were about even at that time. We show a 9 deficiency, a 9 average watts deficiency in '78 and '79.

Q A 9 average deficiency? How much energy do you get from Colstrip, will you get from Colstrip, if it's built, 3 and 4?

A We will get 15% of the project output.

Q How much is that, how many megawatts?

A After both units in Colstrip, we will get approximately 158 average megawatts, 15% of the two units.

Q 158?

A Yes.

Q 15% of 1500 is how much?

A What we have calculated the average energy to be is about 1400 megawatts as the planned capability. We figure it can average about 75% plant factor, so your average megawatts would be about 75% of 1400 megawatts for the total plant. We are getting 15% of the output of the plant.

Q You were going to get 158 then?

A Average.

Q And you knew that in 1978 and 1979 you would need nine of that 158, is that right, when you entered into the letter of intent?

A I think when we entered into the letter of intent, we were looking at 10%, but only one unit would come in in '78-'79.

Q How about 1982-83, what was your predicted deficiency when you entered into the letter of intent to build with the other applicants?

A 1982-83, we showed 142 megawatts average deficiency, in 1983-84, we show 190, approximately -- 189.

Q And what was the last one?

A 189 average megawatts.

Q How long does it take in Washington in your service area to build a power plant from the time you make the decision to the time you get it on line, of the capacity of 190 megawatts?

A In my estimation, I think to build almost any type of power plant you have to go through sitings, evaluation studies, and economic studies, I think it would take you approximately eight to ten years to build a coal-fired plant and if you're looking at nuclear plants, of course you're looking at a larger size, and I feel in the range of ten to twelve years.

Q I'm talking about coal-fired plants.

A I feel within the range of eight to ten years.

Q So in 1972, you knew that in 1984, you would need 190 megawatts, is that what you told me? That's twelve years?

A Yes.

Q Are there any coal-fired plants in the Spokane area?

A No.

Q Why didn't you build a plant in the Spokane area when you knew you had to have that much power in 1972?

A Mr. Meloy, at the time we entered into the Colstrip project, we were investigating putting plants in our service area. We were looking at Canadian coal, we were looking at imports of coal from other parts of the country, and at that time, when Colstrip became available, and looking at Colstrip and the alternatives, Colstrip looked like by far the most viable alternative for us to enter into, and it looked like the logical way to go. That is why we entered into Colstrip.

Q Your answer to that question is that you didn't build a coal-fired plant in Spokane when you knew you were going to need the power in 1972 because there was Colstrip, is that right?

A We were offered an opportunity to participate in Colstrip and again, it was the most attractive and the most viable alternative that we had.

Q Why was it attractive to you, when you could build one in

Spokane, and not have to ship the power all the way out from Colstrip?

A The preliminary analysis that we had made and I think it had been made by the Montana Power Company and maybe other engineers, indicated that the mine-mouth plant at Colstrip was an attractive plant, that the alternatives of Colstrip coal being shipped by rail or powered by wire were somewhat nearer, at least approximately equal, and that railroad escalation would make hauling coal a little more expensive project over the long term of the plant.

Q That decision was made for you, or a basis for that study or decision, were studies made, economic studies made by the Montana Power Company, that they gave you, and that's the reason you decided -- you, Washington Water Power decided not to build at Colstrip?

A No, sir, Mr. Meloy. I may have misspoke myself. I said we were looking at these types of alternatives at the time we entered into Colstrip. We were offered an opportunity to participate in the Colstrip project. It looked like a very good way to go. We'd always had dealings with Montana Power Company. We had no reason to feel that Colstrip wouldn't be an excellent plant for us and an opportunity to participate in the Colstrip plant and we would not give up and not build plants in our service area, but this would be our initial next step and possibly the next step we'd do would be put a plant in our service area.

Q Were there any other considerations, were there any environmental considerations that you made when you decided not to build one in Spokane in 1972?

A Not that I know of, no, sir.

Q No environmental considerations, no reason why you couldn't have built it in Spokane, other than the economics of it?

A Not that I know of.

Q No water problems?

A No water problems that I know of. I assume that you could probably license to build a plant in the Spokane area. We were going on that assumption, and we're still looking at building a plant in our area. One of the things that did concern us was the loss economy, the loss of jobs in our area by not building a plant in our area and having some of the benefits go to other areas. That was one consideration -- that is a good consideration why we'd like to have a plant in our area.

Q You decided to forego those considerations for the benefit of Montana, then, I take it?

A Well, as I said, Mr. Meloy, we haven't given up on putting a plant in our service area. We're still looking at it. In 1972, Colstrip was a viable alternative. It looked like a good way to go, but we had no anticipation that we'd have any of the types of problems we've encountered in licensing the Colstrip project, and Washington Water Power decided to participate.

Q In 1972, did you know that Montana didn't have a Siting Act?

A I'm sure we were aware of it.

Q Maybe that's why you thought licensing problems wouldn't be insurmountable?

A We had just finished completing two units at Centralia we were participating in and it went along fine. We had no idea we'd have problems with additional units.

Q Did Washington have a Siting Act in 1972?

A I don't believe so.

Q I noticed in your statement that you have an exchange agreement with San Diego Gas and Electric?

A Yes, sir.

Q Would you tell me just briefly how that agreement works?

A Yes, sir, we exchange peaking capacity with San Diego in return for off-peak energy from San Diego. We get approximately -- we get exactly 2500 kilowatt hours of energy for every kilowatt of capacity we deliver to San Diego on an annual basis.

Q On page 8 of your statement, you tell us that you are not deficient in peak in 1981 and 1982, is that correct?

A It says we are deficient all years with the exception of '81-82. I think that's right.

Q Is that right?

A Yes, I'm sure it is.

Q Does that mean, then, that if San Diego needs power in 1981 and 1982 that you can give them Colstrip power under your exchange agreement?

A No, it does not.

Q That's not what it means? You just told me that you have an exchange agreement whereby if you have excess peak, you can send it to San Diego, and they vice versa, and your statement says that in 1981-1982, you anticipate extra peak. My question is, is it possible, if San Diego needs the energy, that you can send Colstrip power down to them?

A We are exchanging capacity to San Diego in return for energy. We get the energy from San Diego, Mr. Meloy. It is a firm arrangement. It's not if we happen to have it, it's an obligation we have to deliver power to them and they likewise have an obligation to deliver power to us, and what we are doing, is sending capacity down and we're getting energy back from them. Energy is the reason we are participating in the Colstrip project. This reduces our energy requirements for Colstrip power by having an agreement with San Diego.

Q But you could, in fact, exchange Colstrip peak for San Diego energy in 1981-1982, isn't that right?

A We could exchange capacity from our system. If we had to put Colstrip in to make an exchange arrangement with San Diego delivering capacity, we would get rid of that agreement in a hurry. We are not exchanging Colstrip capacity.

Q I was talking about Colstrip peak.

A All right, if Colstrip were primarily put in as a base load, base energy resource, a resource that provides kilowatt hours to our system, excess capacity is additional units;we can put in our hydro plants or put in combustion turbines. It's short-term capacity over a period of a few hours. There's no energy associated with a capacity delivery, so what we are doing is obtaining a resource that provides us kilowatt hours in exchange for a resource that provides them with some kilowatts over a few hours.

Q When you enter into a decision to build a plant, do you do written studies to determine whether you need the plant?

A Oh, I'm sure we would, yes.

Q Do you do written studies to determine the impact that plant might have on the surrounding locality?

A I don't know that we've been in that position, of having to make that type of study. We are always continually making studies showing the need for a plant, the best time for a plant and how much we need it. This is sort of a requirement-type study.

Q Are they written studies?

A They're like this tabulation that you have in front of you, sir, our exhibit.

Q Why do you reduce them to writing?

A I'm talking of a tabulation that's similar to Exhibit 20-B, which shows our need. We are perpetually making these types of study. This determines our need. Now maybe I don't understand the further part of your question.

Q The further part of my question is, why do you reduce your tabulations, your studies, to writing?

A Why do we?

Q Yes.

A Generally, we don't. In this case we have done it for the purposes of an exhibit form.

Q For the purposes of a decision-maker, is that right, a licensing agency?

A You have me confused. I'm sorry. What I have tried to say, Mr. Meloy, and if I'm not making myself clear, I'm sorry, is that generally we put our studies in the form of tabulations that show our need and requirements for power. Generally, we do not reduce these to writing. They are this type of a tabulation, no narrative along with them, or very little.

Q When you communicate your needs to a joint venturer, you reduce the basis for that need to writing, to some kind of a writing, is that right, so that you can communicate that need to them?

A Well, I assume this writing can be in the form of a tabulation or narrative or something else, or it may be verbally, communication over a phone or a conference call or a meeting, but yes, I would think there would be generally some form of communication between the parties.

Q I guess maybe we're not communicating. What I'm asking you is, before you make a monumental decision such as committing your company to a capital investment, somebody within your company does some studies to determine whether you need that?

A Right.

Q And those studies are in writing, isn't that right?

A Yes, like the ones we've got right here.

Q Where were you born?

A Sandpoint, Idaho.

Q How big a town is Sandpoint, Idaho?

A When I was born there, it was pretty small.

Q How small?

A Oh, I suppose, less than 500.

Q If someone were to propose a 2100-megawatt plant which was 22 miles upwind from Sandpoint, Idaho, would you expect there might be an impact on the environment of that town?

A Yes. I think there could be several impacts, good, bad --

Q When I ask you whether there would be an environmental impact, I am including an impact on the way of life of that community?

A It could enhance the environment, as well as detract from the environment.

Q And you, as a responsible decision-maker for Washington Water Power would want to know what that impact was, wouldn't you?

A Yes.

Q And you'd want to have some kind of a writing, wouldn't you, that explained to you the study and what the results of that study were, wouldn't you?

A You'd have to have some form of communication, I assume, if you were going to have the results of a study conveyed to you, whether it was in writing or somebody described it to you. I don't know which would be a preferable method.

Q We're talking about a 2100-megawatt complex now. We're also talking about some kind of a writing to you as a decision-maker so that you can have some basis for making that decision.

A I'll assume that I want it in writing. I'm not just sure whether that's the way it would come.

Q I'm sure it would.

A You're sure?

Q Yes, aren't you?

A No.

Q You're not sure it would?

A No, it seems like an awful lot of the communications that I see, take place, when decisions are made in our company, you tell the boss what it is and explain the situation to him, and you may not deliver a long legal -- or a long dissertation on it.

Q A short dissertation on it?

A It just depends on what you're trying to do, Mr. Meloy. I don't necessarily feel that all decisions have a prelude to them, a long writing or dissertation on the subject.

Q I'll give you another hypothetical. Let's assume that the Northern Cheyenne Reservation contained 3,000 people, the boundaries of which were nine miles from Colstrip, the population center of which is 22 miles from Colstrip. Might you expect there to be an impact, environmental, cultural, sociological, on that community, the Northern Cheyenne Reservation, from your decision to participate 15% in the project at Colstrip?

A Based on our 15%, you say there would be some -- our 15% participation would have some impact? No, I don't think so.

Q Well, your 15% participation may be that which causes the project to go ahead.

A I doubt that, but I don't think that our 15% participation would have any impact on environment.

Q You are, in fact, participating in it, aren't you?

A That's right.

Q Are you concerned about the impact that it might have on the reservation?

A I'm sure that all the owners, collectively, are concerned about it.

Q I'm asking you, sir.

A I could say I am concerned, because I feel I'm a compassionate individual and I'm concerned about the welfare of --

Q Well, what do you know about the impact of your plant on the Northern Cheyenne Reservation, Mr. Nogle?

A I know very little about it, Mr. Meloy.

Q Did you direct the Montana Power Company to do a study of the impact on the Northern Cheyenne Reservation?

A No, sir, I assumed the Montana Power Company, as sponsor of the Colstrip project, along with Westinghouse, would make an environmental impact study and had a lot more expertise, a lot more knowledge and could do a much, much better job than I could.

Q So they told you something about the impact, is that right?

A They haven't told me very much. I'm not really the person in our company that's had the most conversation regarding the Colstrip project, Mr. Meloy.

Q I take it, then, that you're still concerned about the impact on the Northern Cheyenne Reservation, is that right?

A Personally, I think I would be concerned. As I say, I have compassion for my fellowmen. I'm concerned about their welfare, all over the world, I think.

Q And you're sitting here earlier, telling us that you wish that plant were on line a year earlier and your concerns have not yet been alleviated, is that right?

A I was sitting here telling you I wished the plant had come on a year earlier, yes.

Q And that in view of the fact that you still have concern about the impact of that plant on the Northern Cheyenne Reservation?

A Sure.

MR. MELOY: I have no further questions, Mr. Davis.

HEARING EXAMINER: Very well. Mr. Graybill.

Cross, by Northern Plains Resource Council
By Mr. Graybill:

Q Well, Mr. Nogle, I want to ask you some questions first about the issue of whether or not you supply other utility companies. Does the Washington Water Power sell part of its power to other utility companies?

A Yes, sir.

Q About how much of its power, for example, last year, do you think it sold to other utility companies?

A Mr. Graybill, we have two types of sales we make to other utility companies.

Q Firm and interruptable?

A We have five wholesale for resale customers that are in a little bit different category. They're customers for whom we're entirely responsible for providing the entire power supply for their system and then we have lots of secondary sales, firm power sales, to other utilities.

Q What does it lump?

A Excuse me, sir?

Q What's the lump of all of that? On page 5 of your statement, you say "Contract sales shown by the cross-hatched portion" of your Exhibit No. 20 "include our firm sales to other utilities," and I can't tell from that whether it's a significant factor or an insignificant factor, and I'd like to know what it is.

A On page 5?

Q Yes, sir, the last two lines.

A I'm sorry, Mr. Graybill, but now I forget the question you asked me.

Q I'm asking you how much the sales, firm sales, to other utilities amounts to in the cross-hatched part on your Exhibit 20? Let's start with Exhibit 20 so we understand each other. Exhibit 20 shows your energy loads and your resources, and as I understand it, the lefthand blue and white columns are your resources, and the righthand red columns are your sales, or your needs, isn't that right?

A Right.

Q On the red side, you've got firm system loads which you've defined here and I think I understand it, and then you've got contract sales, and I'm trying to find out how much of this cross-hatched contract sales box you provide to other public utilities who should have some responsibility for getting their own power, and I just want to know how much of that red box is firm sales to other utilities?

A Mr. Graybill, if you turn to Exhibit 20, page 1, 20-B, right here on the top of the exhibit it would show under loads, it would show contracts, sales, and we listed the firm contract sales and show a subtotal which enumerates our contract sales by years, peak and average for each of the years in the exhibit. For example, the first year is 278 megawatts of capacity and 132 megawatts of energy.

Q All the way across, that's what's in the box that you are selling to other utilities, then?

A Yes, these are shown as contract sales. In several instances there may be slightly a misnomenclature because some of these are exchange arrangements as well as -- we sell power to a utility part of the year and we get it back another part of the year.

Q In terms of your charter, you don't have any state obligation to sell to other utilities, only to sell to residential customers, industrial and commercial customers, isn't that right?

A I don't know exactly what our legal obligation is or our utility responsibility to these five customers that I referred to as wholesale for resale customers, but they're included as part of our firm system load.

Q Well, what I mean is, you know, you could agree to sell -- we could sell a great block of power around a circle of power companies and we could raise the red bar indefinitely in that manner, but that's not really what you have to sell to supply the people of eastern Washington with power, is it?

A No.

Q So I still don't know how much of that box -- I suppose I can estimate -- it looks to me like that's about, what, 100 megawatts, the size of the box?

A For the first year, '75-'76, 132 megawatts average.

Q Oh, in other words, the whole of that cross-hatched box is sold to these people that are called contract sales?

A Right, and as I mentioned, Mr. Graybill, a lot of this is an exchange, and it turns around and comes back.

Q So in that sense, it really isn't essential to supply the customers in eastern Washington, is it?

A Yes, these are utility-type arrangements that we made that are firm obligations on our part to deliver the power to them. As I say, part of these are reciprocal types of obligation and we've shown what we delivered to them as a sale and we've shown what we received from the utility as a resource.

Q But as far as Washington Water Power is concerned, only the red bar is really needed to supply your customers, isn't that right?

A That's right, the need to supply our customer load requirements.

Q So this whole cross-hatched part, all the way through the chart, is only needed if you're going to be able to supply other utilities as well as your customers?

A To meet our load requirements, though, you'd have to look at that blue bar, the cross-hatched purchases, which are purchases we've made from other utilities to meet our customer requirement, and as I mentioned, a lot of these are exchange arrangements where the obligation is shown as the red cross-hatched portion, the return, reciprocal obligation of the other utility to deliver to us, is shown in the blue.

Q So you think some of the blue hatched would disappear if you cut out the red hatch?

A You bet, a lot of it would disappear.

Q I presume you're familiar with your company's annual reports, and in 1974, your annual report pointed out that the Centralia plant in-service dates of two coal-fired units were actually advanced. Do you recall that?

A Yes, sir.

Q And they were advanced, not because you needed the power, as obviously, from the chart, you didn't, but to give the power to some of the other utilities, right?

A Right.

Q And then apparently, it says because this energy was not needed by the Washington Water Power for several years, "our share has been assigned to others until needed." I don't know whether you're familiar with that, but that is what you did with that extra power, isn't it?

A That's correct. I'm well aware of that.

Q Then it says, "The Bonneville Power Administration and the Bureau of Reclamation received the entire output until March of 1974," and then it says, "The arrangement with the United States Bureau of Reclamation, Central Valley project, continues through 1981," so I understand, then, that you took your interest in Centralia, which is 15%, and you assigned it first to Bonneville and the Bureau of Rec and then later, to the Bureau of Rec only, is that true?

A We have assigned it, Mr. Graybill, we said we assigned it all to Bonneville and the Bureau through March of 1974. From then on, we assigned a portion to Bonneville for the Central Valley project until December 1981, a small portion of it.

Q Where is the Central Valley project?

A It's in northern California.

Q In other words, you're telling me that the power from your 15%

of Centralia is being sent to California until 1981?

A I said a portion of it, a small portion of it.

Q Well, if we look at your little chart here, we can find out that in 1981, 35 megawatts of peak and 26 megawatts of energy are being assigned to California, isn't that right?

A That's correct.

Q And yet if you look at the bottom of the page, you've been telling Mr. Shenker that your company is in bad shape because you've got a deficit in 1981, haven't you?

A Yes, sir.

Q And in 1979 and '80 you've got a deficit and you're still sending power to California, right?

A That's correct.

Q And not only peak, my friend, but you're sending energy to California, aren't you?

A Right.

Q What really happened is that some time -- let me ask you, when did you make these arrangements with Bonneville and the Bureau of Rec?

A It would be prior to 1971, I am sure.

Q What's really happened, then, is that you have made a decision to contract out your 15% Centralia and you really, in hindsight, made a mistake and you've assigned some to California that you really need, haven't you?

A In '79, '80, and '81, that's correct.

Q And when it says here in your annual report for 1974, which is the most recent one, that because the energy was not needed, the Washington Water Power assigned it, that's a mistake, at least, as to 1980 and 1979, isn't it? It is needed, isn't it?

A We have no choice. It's needed, but we have no choice now.

Q In other words, it's needed by you, but you have sold it to California?

A That is correct.

Q So now you need some from Montana to replace it, isn't that true?

A We need power from some source, yes.

Q And Colstrip happens to be the one you're looking at in '79 and '81, isn't it?

A That's right.

Q So what you're really saying is that we must build a coal-fired generation plant at Colstrip so you can send power to Central Valley in California, isn't that true?

A No, that is not true.

Q Well, is that false?

A We have a system obligation that we incurred. To meet our system obligation, we need additional sources of power, and Colstrip is a source of power. If this contract had been to the Montana Power Company instead of Central Valley, we'd have still had the obligation to deliver the power even if it had been to the State of Montana rather than California. We made a contract, we have an obligation, Mr. Graybill.

Q Well, Centralia is part of your plant, 15% of it, isn't it?

A Yes.

Q And the fact is, you sold that to California two years ago, right?

A We sold a portion of it, sir.

Q And the fact is, you sold a portion of it to California and a portion of it to the Bureau of Rec, but in 1981 --

A We sold 35 megawatts out of 210 megawatts.

Q Right, and that portion of it that you sold to California, it now develops, you need in 1981 in Washington, don't you?

A Yes.

Q So you have to replace it from Montana, right?

A From some source, to meet our customer requirements.

Q Let me ask you the other question, then. Are there places that you can replace it except Montana, because I'm sure we might be glad to let you do that and not build a plant? Are there places that you know of that you can replace it except Montana?

A No places that we can replace it that I know of that we have anticipated getting from Colstrip, at least at this late date.

Q So the fact is, you don't need to say other places. You're really going to replace from Montana power you've already sold to California, aren't you?

A For one year.

Q What do you mean, for one year?

A '79-'80, I have no Colstrip generation to replace it with. I can't replace it with anything with Colstrip until 1980, and the contract ends in December 1981, July '80 until December '81, I can replace it with Colstrip power.

Q Initially, you had intended to replace it in '79 and '80, too, right?

A Yes, right.

Q So the reason you got into the project, one of the reasons, is that you had sold power that you already had a right to to California and you had to replace it with power from Montana or suffer shortages in '79-'80 and '80-'81, isn't that true?

A That is correct, but there are extenuating circumstances to get you into these problems.

Q Of course. Somebody made a bad judgment in your power company or they wouldn't have sold power to California when they hadn't yet got it from Montana, would they? That's an extenuating circumstance, isn't it?

A Would you believe, Mr. Graybill, that the government had an obligation to operate the Hanford project and deliver power to us and then shut the project down in September '71 without hardly any warning and we have not had that power supply, and the quantities, available to us?

Q No, I certainly wouldn't argue that with you a minute.

A Based on certain known facts, as we knew them in '71, we made some decisions which looked like the best decisions for our company for the areas concerned, and now other things have happened, there are mitigating factors involved. Right now we need the power in 1980-81.

Q Oh, there's no question you need it on the chart here, but let's examine your -- somebody has made a mistake, whether it's you or the federal government, we'll find out in a minute. Did you know --

A I don't know that anybody made a mistake. It's just that a project you counted on as a firm resource is not now available to you in that period of time.

Q That's the Hanford plant?

A Right.

Q Did you know when you sold to Centralia that the federal government could cancel the Hanford plant?

A No, sir.

Q You didn't know that?

A No, sir.

Q Well, then, maybe I'd say that it's the federal government who is more at fault, but the fact is, that somebody either was unfair or made a bad judgment that resulted in your having sold power you really had ownership of when you really needed it, isn't that true?

A I can't deny that we need the power in 1980-81.

Q And you really can't deny that Montana power -- I don't mean the company, I mean the power from the State of Montana, is replacing in '79 and '80 or '80 and '81 power that you're going to send to California, can you?

A I couldn't say that's replacing it any more than some power that we're getting from California in '80-'81 or the power that we're getting from any other source in '80-'81. We're getting power from the Idaho Power Company, we're getting power from the San Diego Gas and Electric, so why should I say that Montana is the only one that is providing that power supply?

(MR. GRAYBILL TAKES SEAT AT THE WITNESS TABLE.)

Q I just have to get close enough because we're getting too many signals for my answers and I want to be up here where I can understand. Now, either you need the Colstrip plant or you don't. If you don't need it and there's some other place that you can get the power, tell me where that is.

A We need the Colstrip plant. I know of no viable alternative to replace the Colstrip project.

Q So the fact is, that the Colstrip project is replacing power, in a sense, that you have sold to California? We can agree on that, can't we? Can we agree on that without your looking at your counsel and finding out what the answer is, if possible?

A I'll agree, Mr. Graybill, we need this power and we need this power in 1980-81. We have sold a small portion -- not nearly what Colstrip amounts to -- into Central Valley project in 1980-81, which increases our need for Colstrip power. We would have needed Colstrip power regardless of whether we had made this sale to Central Valley project.

Q It would go a long way toward covering your losses in those years, though, wouldn't it?

A Yes, it would.

Q Now, then, that means that if the Colstrip project is built and put on line, as you hope it will be, the real effect of it will be that some of our power will be either going to or relieving other power to go to California as part of the project for the benefit of the Central Valley project, isn't that true?

A Part of this project, along with every other resource we've got in our system is, Mr. Graybill, not this to any more extent than any other resource.

Q All right, let's look at the next line. You sold some power to Idaho Power Company?

A Yes.

Q Did you say anything in your application here about serving the Idaho people with power when you come in to make power in Colstrip?

A No, sir.

Q Why does Colstrip have to supply power to Idaho residents? And especially, if they're not mentioned in the application?

A Mr. Graybill, I think if you knew the whole context of the Idaho contract, that your feeling would be a little bit different. This Idaho power company that you're referring to, we deliver power to the Idaho Power Company in the summer months and in exchange, we get power from the Idaho Power Company in the winter months. If you'll notice, we deliver 59 average megawatts to Idaho under contract sales, which I assume you're referring to. If you look down under resources, you'll see that the Idaho Power Company -- we receive 140 megawatts and 72 megawatts from the Idaho Power Company. This is an exchange-type arrangement. Now, it's to the benefit of all of our customers and to the benefit of Idaho customers that we have this kind of arrangement, and it benefits both parties. It's a mutually beneficial type of arrangement.

Q I'm not arguing that it's beneficial or it's not beneficial. I presume Idaho Power has surplus power to sell during the winter-time, doesn't it?

A Their maximum load is in the summer-time.

Q So they have power to sell in the winter-time?

A Right.

Q And you've been good enough to buy it from them, haven't you?

A We have been fortunate enough to make an exchange arrangement where we could get it from them in exchange for some summer power.

Q And in exchange, you have promised them some summer power which is part of your energy load and if you didn't have to sell it, you wouldn't have a deficit in 1980 and 1981, would you?

A Yes, sir, I'd have a bigger deficit, because I wouldn't get the power from Idaho Power Company in the winter months.

Q What would Idaho Power Company do, eat their power, or waste it?

A There is plenty of market for power in the winter months in the Northwest.

Q What you really mean is that you might have to pay more for it to get Idaho to give it to you if you weren't exchanging, isn't that right?

A I don't think if I weren't exchanging it that I could get it. I don't believe Idaho would sell it to anybody other than an exchange arrangement. I don't think I'd sell my summer power that I'm giving to Idaho to anybody else other than by an exchange arrangement, also.

Q What would you do, just not generate it?

A I would make an arrangement where I could generate it for summer power for systems that have summer capacity, or have summer loads, and have a surplus of winter power.

Q I'm not questioning your right to make such an arrangement or even the intelligence of such a right, but I am saying, that we ought to understand here in Montana that if we give approval to this plan, that the Colstrip plant will be replacing power that you're selling to Idaho, so that in effect, we're selling power to Idaho, the same as we're selling it to California, or supplying it, isn't that true?

A I don't see how you can put that connotation on it, Mr. Graybill.

Q Well, let's put it this way -- suppose Colstrip 3 and 4 are not built and that you really have in 1979 and '80 an 86-megawatt deficit? Will you still sell Idaho power before you sell your own customers?

A As I mentioned before, this contract to Idaho enables me to serve more of my own customers than without having this contract with Idaho. This contract with Idaho is power that I deliver to them in my low load summer months. In return, I get kilowatt hours back from them in the heavy load winter months when I need it to serve my customers.

Q So you'd sell to the people of Idaho through the Idaho company before you would sell to your own customers if you had a real shortage?

A I'd have a bigger shortage if I didn't.

Q Well, I don't know whether you would or not --

A I do.

Q -- because I don't know whether Idaho would sell or not, and I don't think you do, either, because you haven't had that situation face you. What I'm trying to find out is, if you were really short, would you cut out the contract sales first, or would you cut out your residential and commercial and industrial sales in the City of Spokane?

A I can't answer that question.

Q I don't think you can, either, but in other words, then --

A Because it's not a one or the other question.

Q But the fact is that the Colstrip power supplies you with power so that you can make a sale to Idaho of 59 megawatts in the summer of 1980, isn't that true?

A All right, if that's true, it enables me to get 140 megawatts of capacity back, and an average 72 megawatts back in the same year from Idaho Power Company. It's power I've sold to Idaho and made a good net return on for my customers.

Q I'm not arguing that at all with you, and I certainly don't want you to believe that I want you to break those contracts. I'm merely trying to illustrate that the purpose of the Colstrip plant isn't to supply your customers in Idaho -- in Washington, it's to supply your customers in Washington plus to supply Idaho plus to supply California and that those matters weren't mentioned in your application, isn't that true?

A I don't know what was mentioned in our application. I know in our exhibit we mentioned these contractual arrangements which we have, and they may have been mentioned in our application.

Q They may have?

A I don't know.

Q You're selling Montana Power peaking capacity in all of those years?

A I am exchanging capacity for energy with Montana Power Company.

Q Well, it says contract sales and that's what it means, isn't it, that you sell it to them and they sell it back to you, isn't that right? We do put dollar figures on it, don't we?

A No, we don't. It comes out purely as an exchange type of arrangement.

Q You're giving Montana Power some power in those years, too?

A Right. We're delivering Montana Power Company peak capacity over their heavy load hours.

Q And you're doing the same with San Diego?

A Yes.

Q But the difference is that you claim the Montana power and the San Diego peaking power is no problem at all because that's something you could do easily in terms of timing rather than in terms of having the energy available, right?

A No. I'd say you probably have to make some sacrifices in your system to make these types of arrangement, if you have to put in additional units or additional hydro capacity or combustion turbines, to make these arrangements, but in return for these, we get back energy, which is our more pressing problem, which is more beneficial to our system. Both San Diego and Montana deliver us energy kilowatt hours to meet our requirements, which is a more pressing need than the capacity problem.

Q In the San Diego case, you deliver them far more peaking capacity than they deliver you firm power, don't you? I'm just reading your chart here. You deliver them 122 megawatts and they deliver you 29, isn't that so?

A Yes.

Q So it's just the reverse of the Idaho situation, and maybe if you dropped both of those, you'd be way ahead?

A No. It's not the reverse of the Idaho situation. The Idaho situation, we deliver them capacity and energy in the summer months and we get back capacity and energy in the winter months. The San Diego type of arrangement is where we deliver day in and day out capacity in out-peak hours or in the heavy load hours and we get back energy kilowatt hours in other hours.

Q And you don't need the Colstrip plant at all to deliver the San Diego 122 peaking hours, do you?

A I wouldn't think we would be putting Colstrip in to make an arrangement like this, no.

Q So if you don't get the Colstrip power plant built, it doesn't matter, you'll still be able to deliver San Diego its 122 kilowatt hours or megawatt hours of peak, isn't that true?

A I assume we would continue with the arrangement, yes. If we don't get Colstrip built, we would still continue, both with the Idaho arrangement and the San Diego contract.

Q You've also sold your 10% Hanford nuclean plant, haven't you, your 10% right in the Hanford plant? Isn't that true, or have you got that back now?

A We have that back now. You'd have to tell me which annual report you're looking at.

Q I'm looking at '71. In 1971, you said you'd sold the 10% of

Hanford and 15% of Centralia and 5% of your Canadian entitlement. Have you got your 5% Canadian entitlement back?

A It's coming back in April of this year, April '76.

MR. GRAYBILL: Mr. Examiner, if you intend to stop about 5:00 o'clock, this would be a good time to stop.

HEARING EXAMINER: We'll recess until tomorrow morning at 8:30 o'clock.

(HEARING RECESSED AT 5:00 P.M.)